

Volume

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BOOK A-294

FIELD NOTES

J. S. P.

retracement
OF THE ~~SURVEY~~ OF THE
West
BOUNDARY

of

Township No. 14 South, Range No. 15 East

and the resurvey of the

South, East, and North Boundaries

of

Township No. 14 South, Range No. 15 East,

Of the SALT LAKE BASIN AND Meridian,

in the STATE OF UTAH.

AS SURVEYED BY

John R. Stewart, United States Deputy Surveyor,

Under his Contract No. 250, dated January 2, 1902. ~~1899~~

Resurvey commenced July 13, 1902. ~~1899~~

Resurvey completed July 18, 1902. ~~1899~~

6-151

Ret'd *Red line* 79.40'
" *Centring*
Resurvey *S. Body* *high* 579.40'
" *E. J.* 6.0000'
" *No.* 6.0000'

Li-79.89'

NAMES AND DUTIES OF ASSISTANTS.

Hyrum G. Smith Chairman

John G. Smith Chairman

Jacob A. Acord Moundman

Edwin A. Peay Moundman

Joseph A. Passey Axman

Andy J. Stewart Axman

Otto R. Stewart Flagman

In preliminary affidavits see book C of 135 P&C

BOOK A-294

INDEX DIAGRAM.

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PRELIMINARY OATHS OF ASSISTANTS.

WE, _____ and _____
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of _____

_____, *Chainman.*
_____, *Chainman.*

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of _____

_____, *Moundman.*
_____, *Moundman.*

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of _____

_____, *Axman.*
_____, *Axman.*

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



I, _____, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of _____

_____, *Flagman.*

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



Retracement of West Boundary of T.14 S., R.15 E.

Survey commenced July 13, 1902, and executed with a W. and L. E. Gurley light mountain transit, No. 1, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the latitude and declination arcs. The instrument was examined, tested on the true meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, on June 14, 1902. I examine the adjustments of the instrument, and correct the level and collimation errors, then, to test the solar apparatus, by comparing its indications resulting from solar observations made during p.m. and a.m. hours, with a true meridian, established by Polaris observation, I proceed as follows:

At the cor. of Tps. 13 and 14 S., Rs. 14 and 15 E., latitude $39^{\circ}38'N.$, longitude $110^{\circ}19'31''W.$, I set off $39^{\circ}38'N.$, on the lat. arc; $21^{\circ}53'N.$, on the decl. arc; and at 4 h 2 m p.m., l.m.t., determine a true meridian, with the solar, and mark a point thereof on a stone, firmly set in the ground, 5.00 chs. N. of the cor.

July 13, 1902.

July 14, 1902: At 11 h 59 m p.m., l.m.t., I observe Polaris at eastern elongation, in accordance with the Manual, and mark a point in the line thus determined, by a tack driven in a wooden plug, set in the ground, east of the stone, already set 5.00 chs. N. of the cor. At 6 h 30 m a.m., l.m.t., I lay off the azimuth of Polaris $1^{\circ}35'$ to the west, and mark a point in the true meridian, thus determined, by cutting a small groove in the stone, already set 5.00 chs. N. of the cor.; on which the true meridian falls 0.37 ins. east of the true meridian determined with the solar. At 7 h 2 m a.m., l.m.t., I set off $39^{\circ}38'N.$, on the lat.

Retracement of West boundary of T.14 S., R.15 E.-Continued.

Chains arc; $21^{\circ}48'N.$, on the decl. arc; and mark a point in the true meridian thus determined, with the solar, by a cross on the stone, already set 5.00 chs. N. of the cor.; this mark falls 0.30 ins. east of the true meridian, established by Polaris observation.

The solar apparatus by p.m. and a.m. observations defines positions for true meridians respectively about $0^{\circ}20''$ west and $0^{\circ}16''$ east of the true meridian established by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 7 h 30 m a.m., l.m.t., is $15^{\circ}50.7'W.$, the angle thus determined reduced by the table page 100 of the Manual, gives the mean mag. decl. $15^{\circ}45'E.$

Note: In accordance with Special Instructions I proceed to retrace the boundaries of T.14 S., R.15 E., before proceeding with the subdivision.

From the cor. of Tps. 13 and 14 S., Rs. 14 and 15 E., which is a sandstone, $8 \times 12 \times 5$ ins., above ground, firmly set, and marked and witnessed as described by the surveyor general.

I run

South, on a retracement line bet. secs. 1 and 6, on west boundary of T.14 S., R.15 E.

39.70 The $\frac{1}{4}$ sec. cor., bet. secs. 1 and 6, which is a sandstone, $7 \times 11 \times 4$ ins., above ground, firmly set, and marked and witnessed as described by the surveyor general, bears East 24 lks. dist.

79.40 The cor. of secs. 1, 6, 7, and 12, which is a sandstone, $10 \times 13 \times 4$ ins., above ground, firmly set, and marked and witnessed as described by the surveyor general, bears E. 48 lks. dist.

The course of this line is therefore $N. 0^{\circ}21'W.$ 79.40 chs.

Retracement of West boundary of T.14 S., R.15 E.--Continued.

Chains

South, on a retracement line bet. secs. 7 and 12.

40.02 The $\frac{1}{2}$ sec. cor. bet. secs. 7 and 12, which is a sandstone, 8x6x6 ins., above ground, well set, and marked and witnessed as described by the surveyor general.

80.08 The cor. of secs. 7, 12, 13, and 18, which is a sandstone, 8x7x5 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general.

South, on a retracement line bet. secs. 13 and 18.

39.92 The $\frac{1}{2}$ sec. cor. bet. secs. 13 and 18, which is a sandstone, 10x8x8 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general, bears E. 5 lks. dist.

79.88 The cor. of secs. 13, 18, 19 and 24, which is a sandstone, 6x8x7 ins. above ground, firmly set, and marked and witnessed as described by the surveyor general, bears E. 10 lks. dist.

The course of the line is therefore N. 0° 04' W.

South, on a retracement line bet. secs. 19 and 24.

39.86 The $\frac{1}{2}$ sec. cor. bet. secs. 19 and 24, which is a sandstone, 10x12x4 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general.

79.90 The cor. of secs. 19, 24, 25, and 30, which is a sandstone, 10x14x5 ins. above ground, firmly set, and marked and witnessed as described by the surveyor general.

South, on a retracement line bet. secs. 25 and 30.

40.00 The $\frac{1}{2}$ sec. cor. bet. secs. 25 and 30, which is a sandstone, 6x12x8 ins. above ground, firmly set, and marked and witnessed as described by the surveyor general,

Retracement of West Boundary of T.14 S., R.15 E. -Continued.

Chains bears W.7 lks.dist.

79.85 The cor.of secs.25,30,31,and 36,which is a sandstone,
7x13x6 ins.,above ground,firmly set,and marked and
witnessed as described by the surveyor general,bears
West 14 lks.dist.

The course of this line is therefore N.0°06'E.

South,on a retracement line bet.secs.31 and 36.

40.08 The $\frac{1}{4}$ sec.cor.,bet.secs.31 and 36,which is a sand-
stone,15x18x16 ins.,above ground,firmly set,and marked
and witnessed as described by the surveyor general,
bears E.2 lks.dist.

80.18 The cor.of Tps.14 and 15 S.,Rs.14 and 15 E.,which is
a sandstone,,10x16x8 ins.above ground,firmly set,and
marked and witnessed asdescribed by the surveyor general,
bears E.5 lks.dist.

The course of this line is therefore N.0°2'W.

July 14,1902:At this cor.I set off 21°45'N.,on the
decl.arc;and at 0 h 2 m p.m.,l.m.t.,observe the sun
on the meridian,the resulting lat.is 39°33'N.

N.89°55'E.,on a retracement line bet.secs.6 and 31,
on south bdy.of T.14 S.,R.15 E.

40.00 Find no trace of $\frac{1}{4}$ sec.cor.,after diligent search.

80.00 Find no trace of cor.of secs.5,6,31,and 32,after
diligent search. Set temp. sec.cor.

N.89°55'E.,on a retracement line bet.secs.5 and 32.

40.00 Find no trace of $\frac{1}{4}$ sec.cor.,after diligent search.
Set temp. $\frac{1}{4}$ sec.cor.

80.00 Find no trace of cor.of secs.4,5,32,and 33,after
diligent search.Set temp.sec.cor.

N.89°55'E.,on a retracement line bet.secs.4 and 33.

Retracement of South Boundary of T.14 S., R.15 E.-Continued.

Chains

- 40.00 Find no trace of $\frac{1}{2}$ sec.cor., bet.secs.4 and 33, after diligent search.set temp. $\frac{1}{4}$ sec.cor.
- 80.00 Find no trace of old cor.of secs..3,4,33,and 34, after diligent search.Set temp.sec.cor.

N.89°55'E., on a retracement line bet.secs.3 and 34.

- 40.00 Find no trace of old $\frac{1}{2}$ sec.cor. bet.secs.3 and 34. after diligent search.Set temp. $\frac{1}{4}$ sec.cor.
- 80.00 Find no trace of cor.of secs.2,3,34,and 35, after diligent search.Set temp.sec.cor.

N.89°55'E., on a retracement line bet.secs.2 and 35.

- 40.00 Find no trace of $\frac{1}{2}$ sec.cor., bet.secs.2 and 35, after diligent search.Set temp. $\frac{1}{4}$ sec.cor.
- 80.00 Find no trace of cor.of secs.1,2,35,and 36, after diligent search.Set temp.sec.cor.

N.89°55'E., on a retracement line bet.secs.1 and 36.

- 40.00 Find no trace of $\frac{1}{2}$ sec.cor.bet.secs.1 and 36, after diligent search.Set temp. $\frac{1}{4}$ sec.cor.
- 80.00 Find no trace of cor.of Tps.14 and 15 S.,Rs.15 and 16 E., after diligent search.Set temp.sec.cor.

Note:I search thoroughly all the ground within a radius of 10.00 chs.from this point but fail to find any trace of the old line or old cor.

July 14,1902.

July 15,1902:At 7 h 0 m a.m.,l.m.t.,I set off 39°33' N.,on the lat.arc; 21°39'N.,on the decl.arc;and determine a true meridian,with the solar,at the temp.cor.of Tps.14 and 15 S.,Rs.15 and 16 E.,established last night.

Thence I run

North,on a retracement line bet.secs.31 and 36.

Retracement of East Boundary of T.14 S., R.15 E.-Continued.

Chains

40.00 Search diligently, but find no trace of old $\frac{1}{4}$ sec. cor. bet. secs. 31 and 36. Set temp. $\frac{1}{4}$ sec. cor.

80.00 Find no trace of cor. of secs. 25, 30, 31, and 36, after diligently searching. Set temp. sec. cor. Sec. Cor.

North, on a retracement line bet. secs. 25 and 30.

40.00 Find no trace of $\frac{1}{4}$ sec. cor. bet. secs. 25 and 30, after diligent search. Set temp. $\frac{1}{4}$ sec. cor.

80.00 Find no trace of cor. of secs. 19, 24, 25, and 30, after diligent search. Set temp. sec. cor. Sec. Cor.

North, on a retracement line bet. secs. 19 and 24.

40.00 Find no trace of old $\frac{1}{4}$ sec. cor. bet. secs. 19 and 24. Search diligently. Set temp. $\frac{1}{4}$ sec. cor.

80.00 Find no trace of cor. of secs. 13, 18, 19, and 24, after diligent search. Set temp. sec. cor. Sec. Cor.

North, on a retracement line bet. secs. 13 and 18.

40.00 Find no trace of old $\frac{1}{4}$ sec. cor. bet. secs. 13 and 18. Search diligently. Set temp. $\frac{1}{4}$ sec. cor.

80.00 Find no trace of old cor. of secs. 7, 12, 13, and 18, after diligent search. Set temp. sec. cor.

North, on a retracement line bet. secs. 7 and 12.

40.00 Find no trace of $\frac{1}{4}$ sec. cor., bet. secs. 7 and 12, after diligent search. Set temp. $\frac{1}{4}$ sec. cor.

80.00 Find no trace of old cor. of secs. 1, 6, 7, and 12, after diligent search. Set temp. sec. cor.

North, on a retracement line bet. secs. 1 and 6.

40.00 Find no trace of old $\frac{1}{4}$ sec. cor., bet. secs. 1 and 6, after diligent search. Set temp. $\frac{1}{4}$ sec. cor.

80.00 Search diligently within a radius of 15.00 chs. from this point but fail to find any trace of the

Retracement of East Boundary of T.14 S., R.15 E. - Concluded.

Chains old Tp. cor. or the old line.

Set temp. cor. of Tps. 13 and 14 S., Rs. 15 and 16 E.

July 15, 1902: At this cor. I set off $21^{\circ}35'N.$, on the decl. arc; and at 0 h 3 m p.m., l.m.t., observe the sun on the meridian, the resulting lat. is $39^{\circ}38'N.$

Thence I run

$N.89^{\circ}55'W.$, along north bdy. of T.14 S., R.15 E., bet. secs. 1 and 36.

40.00 Find no trace of old $\frac{1}{4}$ sec. cor., bet. secs. 1 and 36.

80.00 Find no trace of old cor. of secs. 1, 2, 35, and 36, after diligent search. Set temp. cor. of secs. 1, 2, 35, and 36.

$N.89^{\circ}55'W.$, on a retracement line bet. secs. 2 and 35.

40.00 Find no trace of old $\frac{1}{4}$ sec. cor., bet. secs. 2 and 35, Search diligently. Set temp. $\frac{1}{4}$ sec. cor.

80.00 Find no trace of cor. of secs. 2, 3, 34, and 35, after diligently searching for the cor, set temp. sec. cor.

$N.89^{\circ}55'W.$, on a retracement line bet. secs. 3 and 34.

40.00 Find no trace of old $\frac{1}{4}$ sec. cor., bet. secs. 3 and 34, after diligent search. Set temp. $\frac{1}{4}$ sec. cor.

80.00 Find no trace of old cor. of secs. 3, 4, 33, and 34, after diligent search. Set temp. sec. cor.

$N.89^{\circ}55'W.$, on a retracement line bet. secs. 4 and 33.

40.00 Find no trace of old $\frac{1}{4}$ sec. cor., bet. secs. 4 and 33, after diligent search. Set temp. $\frac{1}{4}$ sec. cor.

80.00 Find no trace of old cor. of secs. 4, 5, 32, and 33, after diligent search. Set temp. sec. cor.

$N.89^{\circ}55'W.$, on a retracement line bet. secs. 5 and 32.

40.00 Find no trace of the old $\frac{1}{4}$ sec. cor. bet. secs. 5 and 32, after diligent search. Set temp. $\frac{1}{4}$ sec. cor.

Retracement of North Boundary of T.14 S., R.15 E.-Concluded.

Chains

80.00 Find no trace of old cor. of secs. 5, 6, 31, and 32, after diligent search. Set temp. sec. cor.

N. 89° 55' W., on a retracement line bet. secs. 6 and 31.

40.00 Find no trace of old $\frac{1}{4}$ sec. cor., bet. secs. 6 and 31, after diligent search. Set temp. $\frac{1}{2}$ sec. cor.

79.20 Intersect Tp. bdy. 112 lks. North of the cor. of Tps. 13 and 14 S., Rs. 14 and 15 E., heretofore described.

Note: On account of not being able to find any of the corners on the S., E., or N. bdys. of this township I deem it necessary to resurvey them, as follows:

July 15, 1902.

July 16, 1902: At 7 h 2 m a.m., l.m.t., I set off 39° 33' N., on the lat. arc; 21° 29' N., on the decl. arc; and determine a true meridian, with the solar, at the cor. of Tps. 14 and 15 S., Rs. 14 and 15 E., heretofore described.

Thence I run

East, on a resurvey line bet. secs. 6 and 31.

Over mountainous land; through scattering timber; ascend.

20.00 Top of ridge, 200 ft. above hollow, bears N.E. and S.W.; descend.

33.00 Bottom of hollow, 250 ft. below ridge, course S.W.; ascend.

Allowing for convergency at
39.40 Set a sandstone, 16x12x4 ins., 11 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from which

A pine, 8 ins. diam., bears N. 30° E., 47 lks. dist., marked $\frac{1}{4}$ S. 31, B.T.

A pine, 8 ins. diam., bears S. 30° W., 40 lks. dist., marked $\frac{1}{4}$ S. 6, B.T.

45.00 Enter heavy timber, bears N. and S.

76.50 Leave pine and enter aspen timber, bears N. and S.

79.40 Set a sandstone, 24x12x6 ins., 18 ins. in the ground, for cor. of secs. 5, 6, 31, and 32, marked with 5 notches on

Resurvey of South Boundary of T.14 S., R.15 E.-Continued.

Chains E. and 1 notch on W. edges; from which

An aspen, 15 ins. diam., bears N. 27° E., 14 lks. dist., marked T.14 S., R.15 E., S.32, B.T.

An aspen, 15 ins. diam., bears S. 57° E., 30 lks. dist., marked T.15 S., R.15 E., S.5, B.T.

An aspen, 8 ins. diam., bears S. 5° W., 44 lks. dist., marked T.15 S., R.15 E., S.6, B.T.

An aspen, 7 ins. diam., bears N. 28° W., 32 lks. dist., marked T.14 S., R.15 E., S.31, B.T.

Land mountainous.

Soil, black loam; 1st rate.

Timber, pine and aspen.

Good grass for grazing.

Mountainous or heavily timbered land, 79.40 chs.

East, on a resurvey line bet. secs. 5 and 32.

Over mountainous land; through heavy timber; ascend .

8.00 Top of divide ridge, between Range Creek and Rock Creek canons, 25 ft. above sec. cor., bears N. 20° W. and S. 20° E.; descend along side of mountain.

20.00 Top of spur, bears N. 80° E. and S. 80° W.; descend .

40.00 Set a sandstone, 16x6x6 ins., 11 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from which

An aspen, 8 ins. diam., bears N. 54° W., 159 lks. dist., marked $\frac{1}{4}$ S. 32, B.T.

An aspen, 12 ins. diam., bears S. 65° W., 73 lks. dist., marked $\frac{1}{4}$ S., 5, B.T.

42.45 Trail to Sunnyside, bears N. 24° W. and S. 24° E.

46.00 Bottom of hollow, 200 ft. below ridge, course N.; ascend .

69.00 Top of divide ridge between Rock and Bear canons, 200 ft. above hollow, bears N. 50° E. and S. 50° W.; descend .

80.00 Set a sandstone, 16x10x4 ins., 11 ins. in the ground, for cor. of secs. 4, 5, 32, and 33, marked with 4 notches on E. and 2 notches on W. edges; from which

Resurvey of the South Boundary of T.14 S., R.15 E.-Continued.

Chains An aspen, 8 ins. diam., bears N. 3° E., 120 lks.
 dist., marked T.14 S., R.15 E., S.33, B.T.
 An aspen, 8 ins. diam., bears S. 3° E., 150 lks.
 dist., marked T.15 S., R.15 E., S.4, B.T.
 An aspen, 12 ins. diam., bears S. 81 ° W., 30
 lks. dist., marked T.15 S., R.15 E., S.5, B.T.
 An aspen, 14 ins. diam., bears N. 49° W., 5 lks.
 dist., marked T.14 S., R.15 E., S.32, B.T.

Land, mountainous.

Soil, black loam; 1st rate.

Timber, pine and aspen.

Good grass for grazing.

Mountainous or heavily timbered land, 80.00 chs.

East, on a resurvey line bet. secs. 4 and 33.

Over mountainous land; through heavy timber and scattering deer brush. Descend .

15.00 Head of Bear Canon, 120 ft. below sec. cor., course S.
 80° E.; ascend .

20.00 Leave heavy and enter scattering timber, bears N. and S.

40.00 Set a sandstone, 24x14x4 ins., 18 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from which

A pine, 5 ins. diam., bears N. 23° W., 68 lks.
 dist., marked $\frac{1}{4}$ S.33, B.T.

No other trees within limits; raise a mound of stone,
 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

47.50 Top of ridge, 200 ft. above canon; bears N. and S.
 Bear Spring bears South about 8.00 chs. dist. in canon.
 Descend .

78.50 Bottom of Bear Canon, 100 ft. below ridge, course N. 60° E.
 Ascend .

80.00 Set a sandstone, 18x14x4 ins., 12 ins. in the ground, for
 cor. of secs. 3, 4, 33, and 34, marked with 3 notches on
 E. and 3 notches on W. edges; from which

A pine, 6 ins. diam., bears N. 35° E., 60 lks.
 dist., marked T.14 S., R.15 E., S.34, B.T.

Resurvey of the South Boundary of T.14 S., R.15 E. -Continued.

- Chains
- A pine, 7 ins. diam., bears S. 38° E., 40 lks. dist., marked T.15 S., R.15 E., S.3, B.T.
- An aspen, 8 ins. diam., bears S. 26° W., 15 lks. dist., marked T.15 S., R.15 E., S.4, B.T.
- A pine, 12 ins. diam., bears N. 72° W., 13 lks. dist., marked T.14 S., R.15 E., S.33, B.T.
- Land, mountainous.
- Soil, black loam; 1st rate.
- Timber, pine and aspen.
- Good grass for grazing.
- Mountainous or heavily timbered land, 80.00 chs.
- July 16, 1902; At this cor. I set off 21° 27' N., on the decl. arc; and at 0 h 2 m p.m., l.m.t., observe the sun on the meridian, the resulting lat. is 39° 33' N.
-
- East, on a resurvey line bet. secs. 3 and 34.
- Over mountainous land; through heavy timber; ascend.
- 27.50 Top of ridge, 250 ft. above Bears Canon, bears N.E. and S.W.; descend.
- 29.00 Leave timber, bears N. and S.
- 32.00 Enter dense aspen sapplings, bears N. and S.
- 33.50 Leave aspen sapplings, bears N. and S.
- 38.00 Enter heavy aspen timber, bears N. and S.
- 40.00 Set a sandstone, 15x10x8 ins., 10 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from which
- An aspen, 5 ins. diam. bears N. 13° E., 25 lks. dist., marked $\frac{1}{4}$ S. 34, B.T.
- An aspen, 5 ins. diam., bears S. 19° E., 18 lks. dist., marked $\frac{1}{4}$ S. 3, B.T.
- 47.00 Bottom of hollow, 150 ft. below ridge, course N. 60° E.; ascend.
- 76.00 Top of ridge, 200 ft. above hollow, bears N. and S.; descend.
- 80.00 Set a sandstone, 30x14x6 ins., 22 ins. in the ground, for cor. of secs. 2, 3, 34, and 35, marked with 2 notches on E.

Resurvey of South Boundary of T.14 S., R.15 E.-Continued.

Chains and 4 notches on W. edges; from which

An aspen, 4 ins. diam., bears N. 50° E., 19 lks.

dist., marked T.14 S., R.15 E., S.35, B.T.

A pine, 24 ins. diam., bears S. 31° E., 70 lks.

dist., marked T.15 S., R.15 E., S.2, B.T.

A pine, 6 ins. diam., bears S. 9° W., 80 lks.

dist., marked T.15 S., R.15 E., S.3, B.T.

An aspen, 4 ins. diam., bears N. 30° W., 35 lks.

dist., marked T.14 S., R.15 E., S.34, B.T.

Land, rolling mountain.

Soil, black loam; 1st rate.

Timber, pine and aspen.

Undergrowth, aspen sapplings.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

East, on a resurvey line bet. secs. 2 and 35.

Over mountainous land; through heavy timber; descend abruptly.

18.90 Creek, 5 lks. wide, 6 ins. deep, in Bear Canon, 600 ft. below sec. cor., course S. 70° E.; ascend .

19.00 Leave aspen timber and enter pine and mahogany timber, bears N. 70° W. and S. 70° E.

31.50 Top of ridge, 300 ft. above canon, bears N. and S.; descend .

40.00 Set a sandstone, 26x10x5 ins., 19 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; from which

A pinion pine, 14 ins. diam., bears N. 45° E., 50 lks. dist., marked $\frac{1}{2}$ S.35, B.T.

A pinion pine, 5 ins. diam., bears S. 43° W., 30 lks. dist., marked $\frac{1}{2}$ S.2, B.T.

76.00 Creek, 5 lks. wide, 6 ins. deep, in bottom of Bear Canon, 400 ft. below ridge, course N. 60° E.; ascend abruptly.

80.00 Set a sandstone, 18x10x4 ins., 12 ins. in the ground, for

Resurvey of South Boundary T.14 S., R.15 E. - Concluded.

Chains cor. of secs. 1, 2, 35, and 36, marked with 1 notch on E.
and 5 notches on W. edges; from which

An aspen, 10 ins. diam., bears N. 6° E., 60 lks.
dist., marked T.14 S., R.15 E., S.36, B.T.

A pine, 10 ins. diam., bears S. 45° E., 50 lks.
dist., marked T.15 S., R.15 E., S.1, B.T.

A pine, 8 ins. diam., bears S. 44° W., 45 lks.
dist., marked T.15 S., R.15 E., S.2, B.T.

A pine, 9 ins. diam., bears N. 20° W., 35 lks.
dist., marked T.14 S., R.15 E., S.35, B.T.

Land, mountainous.

Soil, black loam; 1st rate; and rocky; 4th rate.

Timber, pine, aspen, mahogany.

Good grass for grazing.

Mountainous or heavily timbered land, 80.00 chs.

East, on a resurvey line bet. secs. 1 and 36.

Over mountainous land; through heavy timber; ascend .

28.00 Top of ridge, 1000 ft. above sec. cor., bears N. 30° E. and
S. 30° W.; descend .

31.70 Leave timber, bears N. and S.

38.00 Enter pine timber, bears N. and S.

40.00 Set a sandstone, 18x12x4 ins., 12 ins. in the ground, for
 $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; from which

A pine, 4 ins. diam., bears N. 40° E., 42 lks.
dist., marked $\frac{1}{2}$ S.36, B.T.

A red pine, 5 ins. diam., bears S. 42° W., 60 lks.
dist., marked $\frac{1}{2}$ S.1, B.T.

48.00 Bottom of hollow, 500 ft. below ridge, course N.; ascend.

56.00 Top of ridge, 450 ft. above hollow, bears N. 20° W. and S.
20° E.; descend .

80.00 Set a limestone, 18x9x5 ins., 12 ins. in the ground, for
cor. of Tps. 14 and 15 S., Rs. 15 and 16 E., marked with
6 notches on each edge; from which

A red pine, 11 ins. diam., bears N. 43° E., 30

Resurvey of South Boundary T.14 S., R.15 E. -Concluded.

Chains lks.dist., marked T.14 S., R.16 E., S.31, B.T.
 A red pine, 10 ins.diam., bears S.80°E., 35
 lks.dist., marked T.15 S., R.16 E., S.6, B.T.
 A red pine, 14 ins.diam., bears S.44°W., 40
 lks.dist., marked T.15 S., R.15 E., S.1, B.T.
 A pinion pine, 11 ins.diam., bears N.40°W., 35
 lks.dist., marked T.14 S., R.15 E., S.36, B.T.

Land, mountainous very rough.

Soil, loam and gravelly; 2nd and 3rd rate.

Timber, pine and aspen .

Good grass for grazing.

Mountainous or heavily timbered land , 80.00 chs.

Note: I have searched diligently for every cor. along
 the south boundary of this township but fail to
 find any trace of any one of the corners.

July 16, 1902.

July 17, 1902: At 7 h 2 m a.m., l.m.t., I set off 39° 33'
 N. on the lat. arc; 21° 20' N., on the decl. arc; and de-
 termine a true meridian, with the solar, at the cor.
 of Tps. 14 and 15 S. Rs. 15 and 16 E.,

Thence I run

North, bet. secs. 31 and 36.

Over mountainous land; through heavy timber; descend .

35.75 Creek, 8 lks. 7 ins. deep, in bottom of Bear Canon, 200
 ft. below Tp. cor., course N. 70° E.; ascend .

40.00 Set a sandstone, 16x10x4 ins., 11 ins. in the ground, for
 $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which

A red pine, 12 ins.diam., bears E., 25 lks.
 dist., marked $\frac{1}{2}$ S.30, B.T.

A red pine, 5 ins.diam., bears S.30°W., 45
 lks.dist., marked $\frac{1}{2}$ S.36, B.T.

80.00 Set a sandstone, 18x8x5 ins., 12 ins. in the ground, for
 cor. of secs. 25, 30, 31, and 36, marked with 1 notch on S.
 and 5 notches on N. edges; from which

A pinion pine, 5 ins.diam., bears N.75°E., 28

Resurvey of East Boundary of T.14 S., R.15 E.-Continued.

Chains lks.dist., marked T.14 S., R.16 E., S.30, B.T.
 A red pine, 20 ins.diam., bears S.20°E., 35
 lks.dist., marked T.14 S., R.16 E., S.31, B.T.
 A cedar, 4 ins.diam., bears S.40°W., 32 lks.
 dist., marked T.14 S., R.15 E., S.36, B.T.
 A pinion pine, 12 ins.diam., bears N.44°W.,
 42 lks.dist., marked T.14 S., R.15 E., S.25, B.T.

Land, mountainous.

Soil, gravelly loam and rocky; 2nd and 4th rate.

Timber, pine, cedar and aspen.

Good grass for grazing.

Mountainous or heavily timbered land; 80.00 chs.

North, bet. secs. 25 and 30.

Over mountainous land; through heavy timber; ascend .

- 6.50 Top of divide ridge, between Bear and Rock Canons, 100
 ft. above sec. cor., bears N.70°E. and W.; descend .
- 24.50 Top of perpendicular ledge, 25 ft. high, bears E. and W.
- 40.00 Set a limestone, 16x9x4 ins., 11 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; from which
 A pine, 4 ins.diam., bears N.50°E., 46 lks.
 dist., marked $\frac{1}{4}$ S.30, B.T.
 A pine, 11 ins.diam., bears W., 17 lks. .
 dist., marked $\frac{1}{4}$ S.25, B.T.
- 61.15 Rock Creek, 5 lks. wide, 6 ins. deep, rapid current, rocky
 bottom, in bottom of Rock Canon, 700 ft. below ridge,
 course S.70°E.; ascend .
- 80.00 Set a sandstone, 18x9x7 ins., 12 ins. in the ground, for
 cor. of secs. 19, 24, 25, and 30, marked with 4 notches on
 N. and 2 notches on S. edges; from which
 A pine, 9 ins.diam., bears N.34°E., 45 lks.
 dist., marked T.14 S., R.16 E., S.19, B.T.
 A pine, 6 ins.diam., bears S.35°E., 50 lks.
 dist., marked T.14 S., R.16 E., S.30, B.T.
 A pine, 12 ins.diam., bears S.40°W., 39 lks.

Resurvey of East Boundary of T.14 S., R.15 E. -Continued.

Chains dist., marked T.14 S., R.15 E., S.25, B.T.
 A pine, 8 ins. diam., bears N.15°W., 100 lks.
 dist., marked T.14 S., R.15 E., S.24, B.T.

Land, mountainous.
 Soil, sandy and gravelly loam and rocky; 2nd and 4th
 rate.
 Timber, pine and aspen.
 Good grass for grazing.
 Mountainous or heavily timbered land, 80.00 chs.

North, bet. secs. 24 and 19.
 Over mountainous land; through heavy timber; ascend .
 2.00 Top of ridge, 20 ft. above sec. cor., bears N.W. and S.E.
 Descend .
 25.00 Leave timber, bears E. and W.
 40.00 Set a sandstone, 18x10x4 ins., 12 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; and raise a mound of
 stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impractic-
 able.
 48.50 Enter aspen, timber, bears E. and W.
 57.50 Leave timber, bears E. and W.
 60.00 Bottom of hollow, 250 ft. below ridge, course N.E.; as-
 cend .
 70.00 Top of ridge, 200 ft. above hollow, bears N.E. and S.W.;
 descend .
 80.00 Set a sandstone, 24x9x5 ins., 18 ins. in the ground, for
 cor. of secs. 13, 18, 19, and 24, marked with 3 notches
 on N. and 3 notches on S. edges; and raise a mound of
 stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impractic-
 able.
 Land, mountainous .
 Soil, gravelly and loam; 2nd and 3rd rate.
 Timber, aspen.
 Good grass for grazing.
 Mountainous or heavily timbered land, 80.00 chs.

Resurvey of East-Boundary of T.14 S., R.15 E. -Continued.

Chains July 17, 1902: At this cor. I set off $21^{\circ}17'N.$, on the decl. arc; and at 0 h 2 m p.m., l.m.t., observe the sun on the meridian, the resulting lat. is $39^{\circ}36'N.$

North, bet. secs. 13 and 18.

Over mountainous land; through scattering undergrowth; descend .

- 20.00 Enter sandstone boulders , bears E. and W.
- 25.50 Creek, 4 lks. wide, 4 ins. deep, in bottom of Summer House Canon, 400 ft. below sec. cor., course $S.80^{\circ}E.$; ascend .
- 33.00 Leave boulders, bears E. and W.
- 40.00 Set a sandstone, $24 \times 10 \times 4$ ins., 18 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
- 61.00 Top of ridge, 250 ft. above canon, bears E. and W.; descend .
- 80.00 Set a sandstone, $22 \times 9 \times 5$ ins., 16 ins. in the ground, for cor. of secs. 7, 12, 13, and 18, marked with 4 notches on S. and 2 notches on N. . edges; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
- Land, mountainous .
- Soil, gravelly loam and rocky; 2nd and 4th rate.
- No timber.
- Undergrowth, deer and sage brush.
- Good grass for grazing.
- Mountainous land, 80.00 chs.

North, bet. secs. 7 and 12.

Over mountainous land; through dense undergrowth; descend .

- 3.00 Bottom of hollow, 60 ft. below sec. cor., course $N.65^{\circ}E.$; ascend over sandstone boulders and ledges .

Resurvey of East Boundary of T.14 S., R.15 E. -Continued.

Chains

- 9.00 Leave boulders and ledges, bears E. and W.
- 15.00 Top of ridge, 150 ft. above hollow, bears N. 80° E. and S. 80° W.; descend .
- 28.00 Bottom of hollow, 100 ft. below ridge, course N. E.; ascend .
- 40.00 Set a sandstone, 20x10x6 ins., 15 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
- 40.10 Top of ridge, 120 ft. above hollow, bears N. 50° W. and S. 50° E.; descend .
- 69.25 Creek, 8 lks. wide, 6 ins. deep, rapid current, in bottom of Flat Canon, 800 ft. below ridge, course S. 70° E.; ascend abruptly over steep mountain.
- 70.00 Enter scattering pine timber, bears E. and W.
- 80.00 Set an oil sandstone, 18x13x5 ins., 12 ins. in the ground, for cor. of secs. 1, 6, 7, and 12, marked with 5 notches on S. and 1 notch on N. edges; from which
- A pinion pine, 14 ins. diam., bears N. 75° E., 56 lks. dist., marked T. 14 S., R. 16 E., S. 6, B. T.
- A pinion pine, 11 ins. diam., bears S. 80° E., 78 lks. dist., marked T. 14 S., R. 16 E., S. 7, B. T.
- A pinion pine, 13 ins. diam., bears S. 15° W., 23 lks. dist., marked T. 14 S., R. 15 E., S. 12, B. T.
- A pinion pine, 17 ins. diam., bears N. 15° W., 20 lks. dist., marked T. 14 S., R. 15 E., S. 1, B. T.
- Land, mountainous.
- Soil, gravelly and rocky; 2nd and 4th rate.
- Timber, pine and aspen.
- Good grass for grazing.
- Undergrowth, sage and deer brush.
- Mountainous land, or land covered with dense undergrowth, 80.00 chs.

Resurvey of East boundary of T.14 S., R.15 E.-Continued.

Chains Over mountainous land; through scattering timber and scattering undergrowth; ascend .

40.00 Set a sandstone, 20x14x4 ins., 15 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which.

A pinion pine, 12 ins. diam., bears N. 60° E., 45 lks. dist., marked $\frac{1}{2}$ S. 6, B.T.

A pinion pine, 16 ins. diam., bears S. 46° W., 30 lks. dist., marked $\frac{1}{2}$ S. 1, B.T.

50.00 Top of ridge, 500 ft. above sec. cor., bears N.W. and S.E.; descend gradually .

80.00 Note: Knowing from my retracement of the boundaries of this township that this point will be the point for the permanent cor. of Ts. 13 and 14 S., Rs. 15 and 16 E., I therefore

Set a sandstone, 18x15x4 ins., 12 ins. in the ground, for cor. of Tps. 13 and 14 S., Rs. 15 and 16 E., marked 13 S. on N.E., 16 E. on S.E., 14 S. on S.W., and 15 E. on N.W. faces; with 6 notches on each edge; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, S. of cor. Pits impracticable.

Land, mountainous.

Soil, gravelly and rocky; 2nd and 3rd rate .

Timber, pine .

Undergrowth, mahogany and deer brush .

Good grass for grazing.

Mountainous land, 80.00 chs.

Note: I made diligent and systematic search for every $\frac{1}{2}$ sec. and sec. cor. on this boundary but fail to find any trace of any of them.

July 17, 1902.

July 18, 1902: At 7 h 2 m a.m., l.m.t., I set off 39° 38' N., on the lat. arc; 21° 10' N., on the decl. arc; and determine a true meridian, with the solar, at the cor. of Tps. 13 and 14 S., Rs. 15 and 16 E.

Resurvey of North boundary of T.14 S., R.15 E.

- Chains Note: Knowing from my retracement line of the north boundary of this township that the course of the true line from this cor. to the cor. of Tps. 13 and 14 S., Rs. 14 and 15 E., is S. 89° 52' W. I run S. 89° 52' W., on a true resurvey line bet. secs. 1 and 36. Over mountainous land; through dense undergrowth; ascend.
- 40.00 Find no trace of old $\frac{1}{4}$ sec. cor.
Set a limestone, 17x11x4 ins., 11 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
- 42.00 Top of ridge, 200 ft. above Tp. cor., bears N. and S.; descend.
- 42.10 Enter scattering timber, bears N. and S.
- 59.00 Bottom of hollow, 200 ft. below ridge, course S.; ascend.
- 75.00 Top of ridge, 100 ft. above hollow, bears N. and S.; descend.
- 80.00 Set a limestone, 18x12x4 ins., 12 ins. in the ground, for cor. of secs. 1, 2, 35, and 36, marked with 1 notch on E. and 5 notches on W. edges; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
Land, mountainous.
Soil, sandy and gravelly; 3rd rate.
Timber, pine.
Undergrowth, sage and deer brush.
Good grass for grazing.
Mountainous land, or land covered with dense undergrowth, 80.00 chs.
- Note: Find no trace of old cor. of secs. 1, 2, 35, and 36.
-
- S. 89° 52' W., on a true resurvey line bet. secs. 2 and 35. Over mountainous land; through dense undergrowth and scattering timber; descend.
- 1.25 Bottom of hollow, 100 ft. below sec. cor., course S. E.; ascend.

Resurvey of North boundary of T.14 S., R.15 E.-Continued.

Chains

- 10.00 Top of ridge, 50 ft. above hollow, bears N. and S.; descend .
- 22.00 Bottom of Bishop's Canon, 50 ft. below ridge, course S.E.; ascend .
- 37.00 Top of ridge, 100 ft. above canon, bears N. and S.; descend .
- 40.00 Find no trace of old $\frac{1}{4}$ sec. cor.
Set a sandstone, 24x14x4 ins., 18 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
- 47.50 Bottom of Bishop's Canon, 100 ft. below ridge, course N.E.; ascend .
- 78.00 Top of ascent, 100 ft. above canon, bears N.W. and S.E.; thence over mesa.
- 80.00 Find no trace of old sec. cor.
Set a sandstone, 22x12x4 ins., 16 ins. in the ground, for cor. of secs. 2, 3, 34, and 35, marked with 2 notches on E. and 4 notches on W. edges; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
Land, mountainous and level mesa.
Soil, sandy loam and rocky; 2nd and 4th rate.
Timber, pine .
Undergrowth, sage brush.
Good grass for grazing.
Mountainous land, or land covered with dense undergrowth, 80.00 chs.
-
- S. 89° 52' W., on a true resurvey line bet. secs. 3 and 34.
Over rolling mesa; through dense undergrowth.
- 10.00 Leave mesa, bears N.E. and S.W.; descend .
- 28.00 To point from which an old cabin bears N. about 20.00 chs. dist.

Resurvey of North boundary of T.14 S., R.15 E.-Continued.

Chains

- 31.50 Enter aspen timber, bears N.60°E. and S.60°W.
- 35.50 leave aspen timber and enter scattering pine, bears N. and S.
- 40.00 Find no trace of old $\frac{1}{4}$ sec. cor.
Set a sandstone, 20x8x5 ins., 15 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from which
- A pine, 4 ins. diam., bears N.35°E., 70 lks. dist., marked $\frac{1}{4}$ S.34, B.T.
- An aspen, 5 ins. diam., bears S.45°W., 63 lks. dist., marked $\frac{1}{4}$ S.3, B.T.
- 40.75 Bottom of hollow, 150 ft. below mesa, course N.E.; ascend.
- 60.00 Enter aspen sapplings, bears N. and S.
- 65.00 Leave aspen sapplings, bears N. and S.
- 70.00 Top of ridge, 150 ft. above hollow, bears N. and S.; descend.
- 80.00 Find no trace of old sec. cor.
Set a sandstone, 24x10x4 ins., 18 ins. in the ground, for cor. of secs. 3, 4, 33, and 34, marked with 3 notches on E. and 3 notches on W. edges; from which
- A pine, 7 ins. diam., bears N.13°E., 86 lks. dist., marked T.13 S., R.15 E., S.34, B.T.
- A pine, 6 ins. diam., bears S.41°E., 32 lks. dist., marked T.14 S., R.15 E., S.3, B.T.
- A pine, 8 ins. diam., bears S.69°W., 27 lks. dist. marked T.14 S., R.15 E., S.4, B.T.
- A pine, 6 ins. diam., bears N.52°W., 51 lks. dist., marked T.13 S., R.15 E., S.33, B.T.
- Land, mountainous and rolling mesa.
- Soil, sandy and rocky; 3rd and 4th rate.
- Timber, pine and aspen.
- Undergrowth, sage and deer brush.
- Good grass for grazing.
- Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

Resurvey of North Boundary of T.14 S., R.15 E. -Continued.

Chains July 18, 1902: At the noon hour the sky is overcast and solar observations are impossible.

S. $89^{\circ} 52' W.$, on a true resurvey line bet. secs. 4 and 33.
Over mountainous land; through heavy pine timber; descend.

9.00 Leave timber, bears N.E. and S.W.

13.00 Enter aspen sapplings, bears N.E. and S.W.

23.00 Jack Creek, 3 lks. wide, 3 ins. deep, in bottom of Jack Canon, 500 ft. below sec. cor., course N. $60^{\circ} E.$; ascend.

31.50 Shale ledge, 30 ft. high, bears N.E. and S.W.

40.00 Find no trace of old $\frac{1}{4}$ sec. cor.

Set a sandstone, 20x12x6 ins., 15 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from which

A pinion pine, 14 ins. diam., bears N. $45^{\circ} W.$, 61 lks. dist., marked $\frac{1}{4}$ S. 33, B.T.

A pinion pine, 20 ins. diam., bears S. $63^{\circ} W.$, 81 lks. dist., marked $\frac{1}{4}$ S. 4, B.T.

Enter scattering pine timber, bears N. and S.

80.00 Find no trace of old sec. cor.

Set a sandstone, 15x6x6 ins., 10 ins. in the ground, for cor. of secs. 4, 5, 32, and 33; marked with 4 notches on E. and 2 notches on W. edges; from which

A pinion pine, 18 ins. diam., bears N. $30^{\circ} E.$, 65 lks. dist., marked T. 13 S., R. 15 E., S. 33, B.T.

A red cedar, 6 ins. diam., bears S. $59^{\circ} W.$, 200 lks. dist., marked T. 14 S., R. 15 E., S. 5, B.T.

No other trees within limits; raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, mountainous.

Soil, black loam; 1st rate.

Timber, pine and cedar.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, 80.00 chs.

Resurvey of the North boundary of T.14 S., R.15 E. -Continued.

Chains

✓
S. $89^{\circ}52'W.$, on a true resurvey line bet. secs. 5 and 32.
Over mountainous land; through scattering timber and
scattering undergrowth; ascend .

27.00 Enter heavy timber, bears N. and S.

35.50 Top of ridge, 300 ft. above sec. cor., bears N.E. and
S.W.; descend .

36.00 Leave timber, bears N. and S.

40.00 Find no trace of old $\frac{1}{4}$ sec. cor.

Set a sandstone, 18x9x4 ins., 12 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of
stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impractic-
able.

45.00 Enter aspen timber, bears N. $60^{\circ}E.$ and S. $60^{\circ}W.$

66.00 Leave timber, bears N. $60^{\circ}E.$ and S. $60^{\circ}W.$

80.00 Find no trace of old sec. cor.

Set a limestone, 20x10x4 ins., 15 ins. in the ground, for
cor. of secs. 5, 6, 31, and 32, marked with 5 notches on
E. and 1 notch on W. edges; and raise a mound of stone,
2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, mountainous.

Soil, gravelly and rocky; 3rd and 4th rate.

Timber, pine and aspen.

Undergrowth, sage and deer brush.

Good grass for grazing.

Mountainous or heavily timbered land, 80.00 chs.

✓
S. $89^{\circ}52'W.$, on a true resurvey line bet. secs. 6 and 31.
Over mountainous land; through dense undergrowth; des-
cend .

9.00 Enter heavy aspen timber and leave undergrowth, bears
N. $15^{\circ}W.$ and S. $15^{\circ}E.$

11.00 Bottom of hollow, 200 ft. below sec. cor., course N. 30°
W.; ascend .

18.80 Trail, bears N. $35^{\circ}W.$ and S. $35^{\circ}E.$

Resurvey of North boundary of T.14 S., R.15 E.-Concluded.

Chains

- 35.00 Top of ridge, 300 ft. above hollow, bears N.E. and S.W.; descend .
- 40.00 Find no trace of old $\frac{1}{4}$ sec. cor.
Set a limestone, 17x14x4 ins., 11 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from which
A red pine, 4 ins. diam., bears N. 36° E., 38 lks. dist., marked $\frac{1}{4}$ S. 31, B.T.
A red pine, 6 ins. diam., bears S. 52 lks. dist. marked $\frac{1}{4}$ S. 6, B.T.
- 61.50 Creek, 5 lks. wide, 3 ins. deep, in bottom of canon, 350 ft. below ridge, course N.E.; ascend .
- 62.50 Leave timber, bears N.E. and S.W.
- 80.00 The cor. of Tps. 13 and 14 S., Rs. 14 and 15 E., heretofore described .
Land, mountainous.
Soil, black loam; 1st rate.
Timber, pine and aspen.
Undergrowth, oak, sage and deer brush.
Good grass for grazing.
Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

July 18, 1902.

Boundaries of T.14 S., R.15 E.

Boundaries of T.14 S., R.15 E.

Latitudes, departures, and closing errors.

Line designated	True bearing	distance chs.	Latitudes		Departures	
			N. chs	S. chs.	E. chs.	W. chs.
W.bdy.T.14 S.,R.15 E.	S.0°21'E	79.40		79.40	.48	
W.bdy.T.14 S.,R.15 E.	South	80.08		80.08		
W.bdy.T.14 S.,R.15 E.	S.0°04'E	79.88		79.88	.10	
W.bdy.T.14 S.,R.15 E.	South	79.90		79.90		
W.bdy.T.14 S.,R.15 E.	S.0°6'W	79.85		79.85		.14
W.bdy.T.14 S.,R.15 E.	S.0°02'E	80.18		80.18	.05	
S.bdy.T.14 S.,R.15 E.	East	479.40			479.40	
E.bdy.T.14 S.,R.15 E.	North	480.00	480.00			
N.bdy.T.14 S.,R.15 E.	S.89°52'W	480.00		1.12		480.00
Convergency						.60
Totals			480.00	480.41	480.03	480.74
Error in lat.				<u>480.00</u>		<u>.03</u>
Error in dep.				.41		.71

July 18, 1902.

John R Stewart

U.S. Deputy Surveyor.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by _____
 _____, United States Deputy Surveyor, to assist in running, measuring, and
 marking the lines and corners described in the foregoing field notes of the survey of _____
 showing the respective capacities in which they acted:

_____ Chairman.
 _____ Chairman.
 _____ Moundman.
 _____ Moundman.
 _____ Arman.
 _____ Arman.
 _____ Flagman.

In final affidavits see book K # 125876

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____
 _____, United States Deputy Surveyor, in surveying all
 those parts or portions of the _____
 _____ of the _____
 _____ meridian, _____ of _____, which are represented
 in the foregoing field notes as having been surveyed by him and under his direction, and that said survey
 has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the
 corner monuments established, according to the instructions furnished by the United States Surveyor
 General for _____

_____ Chairman.
 _____ Chairman.
 _____ Moundman.
 _____ Moundman.
 _____ Arman.
 _____ Arman.
 _____ Flagman.

In final affidavits see book K # 125876

Subscribed and sworn to before me this _____ }
 day of _____, 189 _____ }



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from _____ United States Surveyor General for _____, bearing date of the _____ day of _____, 189 _____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____ of the _____ meridian, in the _____ of _____, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

John R. Stewart
Book 1006

United States Deputy Surveyor.

Subscribed by said _____, and sworn to before me }
 this _____ day of _____, 189 _____



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Wash Lake Co., Utah Jan 18 1902, 189 _____
rehearsal re
 The foregoing field notes of the survey of *The South East, North West*
Boundaries of Township 14 South Range 15 East
of The Salt Lake Basin & Precidary, Utah

executed by *John R. Stewart*
 under his contract No. *250*, dated *January 2, 1902*, 189 _____, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the *rehearsal* surveys they describe, are hereby approved.

Edward H. ...
 United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____ has been correctly copied from the original notes on file in this office.

United States Surveyor General.

Field No. 3, 1902

1806

12-11-03 35

ALPINE
J. H.

4-079.

F.

BOOK A-294

FIELD NOTES

OF THE SURVEY OF THE

2.32.

SUBDIVISION

of

Township No. 14 South, Range No. 15 East

Of the SALT LAKE BASE AND Meridian,

in the STATE OF UTAH

AS SURVEYED BY

John R. Stewart, United States Deputy Surveyor,

Under his Contract No. 250, dated January 2, 1902, ~~180x~~

Survey commenced July 19, 1902, ~~180x~~

Survey completed July 30, 1902, ~~180x~~

h 59.79 52

NAMES AND DUTIES OF ASSISTANTS.

Hyrum G. Smith Chainman

John G. Smith Chainman

Jacob A. Acord Moundman

Edwin A. Peay Moundman

Joseph A. Passey Axman

Andy J. Stewart Axman

Otto R. Stewart Flagman

In preliminary official order of A. J. 19. 5. 1918

BOOK A-294

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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, and
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of

....., *Chainman.*

....., *Chainman.*

Subscribed and sworn to before me this }
day of, 189 }



WE, and
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of

....., *Moundman.*

....., *Moundman.*

Subscribed and sworn to before me this }
day of, 189 }



WE, and
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of

....., *Axman.*

....., *Axman.*

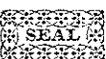
Subscribed and sworn to before me this }
day of, 189 }



I,, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of

....., *Flagman.*

Subscribed and sworn to before me this }
day of, 189 }



Subdivision of T.14 S., R.15 E.-Continued.

Survey commenced July 19, 1902, and executed with a W. and L. E. Gurley light mountain transit, No. 1, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other reading to single minutes of arc; which is also the least count of the latitude and declination arcs.

The instrument was examined, tested on the true meridian at Salt Lake City, and was approved by the surveyor general for Utah, on June 14, 1902.

I examine the adjustments of the instrument, and correct the level and collimation errors, then, to test the solar apparatus, by comparing its indications resulting from solar observations made during p.m. and a.m. hours, with a true meridian, established by observation on Polaris, I proceed as follows:

At the reestablished cor. of secs. 1, 2, 35, and 36, on S. Bdy. of Tp., heretofore described, latitude $39^{\circ}33'N.$, longitude $110^{\circ}13'54''W.$, I set off $39^{\circ}33'N.$, on the lat. arc; $20^{\circ}55'N.$, on the decl. arc; and at 4 h 2 m p.m., l.m.t., determine a true meridian, with the solar, and mark a point thereof on a stone, firmly set in the ground, 5.00 chs. N. of the cor.

At 11 h 39.5 m p.m., l.m.t., I observe Polaris at eastern elongation, in accordance with the Manual, and mark a point in the line thus determined, by a tack driven in a wooden plug set in the ground, east of the stone already set, 5.00 chs. N. of the cor.

July 19, 1902.

July 20, 1902: At 6 h 30 m a.m., l.m.t., I lay off the Azimuth of Polaris $1^{\circ}35'$ to the west, and mark a point in the true meridian, thus determined, by cutting a small groove in the stone already set 5.00 chs. N. of the cor.; on which the true meridian, falls 0.38 ins. east of the true meridian, determined with the solar.

Subdivision of T.14 S., R.15 E. -Continued.

Chains At 7 h 2 m a.m., l.m.t., I set off $39^{\circ}33'N.$, on the lat. arc; $20^{\circ}48'N.$, on the decl. arc; and mark a point in the true meridian, determined with the solar, by a cross on the stone, already set 5.00 chs. N. of the cor.; this mark falls 0.32 ins. east of the true meridian, established by Polaris observation.

The solar apparatus by p.m. and a.m. observations defines positions for true meridian, respectively about $0'20''$ west and $0'17''$ east of the true meridian established by Polaris observation; therefore I conclude that the adjustments of the instrument, are satisfactory.

The magnetic bearing of the true meridian at 8 h 0 m a.m., l.m.t., is $16^{\circ}8'W.$, the angle thus determined reduced by the table page 100 of the Manual gives the mean mag. decl. $16^{\circ}03'E.$

From the cor. of secs. 1, 2, 35, and 36, on S. bdy. of Tp. heretofore described, as re-established by me.

I run

$N.0^{\circ}1'W.$, bet. secs. 35 and 36.

Over mountainous land; through scattering timber; descend abruptly .

16.00 Creek, 5 lks. wide, 5 ins. deep, in bottom of Bear Canon, 300 ft. below sec. cor., course $N.60^{\circ}E.$; ascend abruptly.

28.35 Top of ridge, 500 ft. above canon, bears $N.W.$ and $S.60^{\circ}E.$. Descend .

40.00 Set a sandstone, $18 \times 10 \times 4$ ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; from which

An aspen, 4 ins. diam., bears $N.4^{\circ}E.$, 70 lks. dist., marked $\frac{1}{4}$ S. 36, B.T.

An aspen, 6 ins. diam., bears $N.10^{\circ}W.$, 74 lks. dist., marked $\frac{1}{4}$ S. 35, B.T.

43.00 Creek, 3 lks. wide, 3 ins. deep, in bottom of canon, 400 ft. below ridge, course $S.60^{\circ}E.$; ascend .

Subdivision of T.14 S., R.15 E. -Continued.

Chains

60.00 Leave timber, bears E. and W.

75.00 Top of ascent, 300 ft. above canon, bears E. and W.; thence over mesa. Enter dense undergrowth.

80.00 Set a sandstone, 24x15x4 ins., 18 ins. in the ground, for cor. of secs. 25, 26, 35, and 36, marked with 1 notch on S. and 1 notch on E. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.

Land, mountainous and rolling.

Soil, gravelly and rocky; 3rd and 4th rate.

Timber, pine and aspen.

Undergrowth, sage and deer brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth, 80.00 chs.

East, on a random line bet. secs. 25 and 36.

40.00 Set temp. ¼ sec. cor.

80.22 Intersect E. Bdy. of Tp., 16 lks. N. of the re-established cor. of secs. 25, 30, 31, and 36, heretofore described.

Thence I run

N. 89° 53' W., on a true line bet. secs. 25 and 36.

Over mountainous land; through heavy timber; ascend.

22.00 Leave timber, bears N. and S.

40.11 Set a sandstone, 20x16x4 ins., 15 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.

60.00 Top of ascent, 300 ft. above sec. cor., bears N. 80° E. and S. 80° W.; thence over rolling mesa through dense undergrowth.

67.00 Leave undergrowth and enter heavy aspen timber, bears N. 50° W. and S. 50° E.

70.00 Leave timber and enter dense undergrowth, bears N. W. and S. E.

Subdivision of T.14 S., R.15 E.-Continued.

Chains

- 80.22 The cor. of secs. 25, 26, 35, and 36.
 Land, mountainous and rolling .
 Soil, black loam and gravelly; 1st and 3rd rate.
 Timber, pine and aspen.
 Undergrowth, sage and deer brush.
 Good grass for grazing.
 Mountainous or heavily timbered land, or land covered
 with dense undergrowth, 80.22 chs.
-
- N.0°01'W., bet. secs. 25 and 26.
 Over rolling mesa; through dense undergrowth; descend
 gently .
- 13.25 Leave mesa, bears E. and W. ;
 Enter scattering timber . Descend .
- 40.00 Set a sandstone, 20x16x4 ins., 15 ins. in the ground, for
 $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which
 An aspen, 4 ins. diam., bears N.35°E., 20 lks.
 dist., marked $\frac{1}{2}$ S.25, B.T.
 An aspen, 5 ins. diam., bears S.20°W., 22 lks.
 dist., marked $\frac{1}{2}$ S.26, B.T.
- 41.00 Creek, 6 lks. wide, 5 ins. deep, in bottom of Rock Canon,
 400 ft. below mesa, course N.65°E.; ascend .
- 46.00 Top of ridge, 100 ft. above canon, bears N.60°W. and
 S.60°E.; descend .
- 56.00 Bottom of hollow, 80 ft. below ridge, course S.60°E.;
 ascend .
- 68.00 Leave scattering timber, bears E. and W. .
- 80.00 Set a sandstone, 26x10x6 ins., 19 ins. in the ground, for
 cor. of secs. 23, 24, 25, and 26, marked with 2 notches
 on S. and 1 notch on E. edges; and raise a mound of
 stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impractic-
 able.
 Land, mountainous and rolling mesa.
 Soil, black loam and gravelly; 1st and 3rd rate.
 Timber, pine and aspen.

Subdivision of T.14 S., R.15 E. -Continued.

- Chains Undergrowth, oak and sage brush .
 Good grass for grazing.
 Mountainous land, or land covered with dense under-
 growth, 80.00chs.
-
- S.89°53'E., on a random line bet. secs. 24 and 25.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 60.00 Intersect E. bdy. of Tp., 16 lks. S. of the re-established
 cor. of secs. 19, 24, 25, and 30, heretofore described.
 Thence I run
 West, on a true line bet. secs. 24 and 25.
 Over mountainous land; through heavy timber; descend .
 29.90 Creek, 2 lks. wide, 3 ins. deep, in bottom of canon, 250 ft.
 below ridge, course S.30°E.; ascend .
 30.10 A small spring bears N.20°W. about 10.00 chs. dist.
 33.00 Top of ridge, 50 ft. above canon, bears N.10°W. and S.20°
 E.; descend . Leave timber, bears with ridge.
 39.50 Bottom of hollow, 100 ft. below ridge, course S.30°E.;
 ascend .
 40.00 Set a sandstone, 18x9x7 ins., 12 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of
 stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impractic-
 able.
 72.00 Top of ridge, 400 ft. above canon, bears N.W. and S.E.;
 descend through scattering undergrowth.
 80.00 The cor. of secs. 23, 24, 25, and 26.
 Land, mountainous.
 Soil, black loam and gravelly; 1st and 4th rate.
 Timber, pine and aspen.
 Undergrowth, sage and deer brush.
 Good grass for grazing.
 Mountainous or heavily timbered land, 80.00 chs.
 July 20, 1902: At the noon hour the sky is overcast and
 solar observations are impossible.
-
- N.0°01'W., bet. secs. 23 and 24.

Subdivision of T.14 S., R.15 E. -Continued.

- Chains Over mountainous land; through dense undergrowth; ascend .
- 12.50 Top of ridge, 200 ft. above sec. cor., bears N. 80° W. and S. E.; descend .
- 27.00 Enter aspen sapplings, bears E. and W.
- 28.00 Leave aspen sapplings and enter scattering aspen timber, bears E. and W.
- 40.00 Set a sandstone, 20x8x4 ins., 15 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; from which
- An aspen, 4 ins. diam., bears N. 30° E., 237 lks. dist., marked $\frac{1}{4}$ S. 24, B. T.
- An aspen, 4 ins. diam., bears S. 63° W., 176 lks. dist., marked $\frac{1}{4}$ S. 23, B. T.
- 60.00 Creek, 3 lks. wide, 3 ins. deep, in bottom of Summer House Canon, 450 ft. below ridge, course N. 60° E.; a corral bears E. about 4.00 chs. dist. ; ascend .
- 65.00 To point from which a cabin bears E. about 15.00 chs. dist. (claimant unknown)
- 80.00 Top of ridge, 100 ft. above canon, bears N. 65° E. and S. 85° W.
- Set a sandstone, 18x10x5 ins., 12 ins. in the ground, for cor. of secs. 13, 14, 23, and 24, marked with 3 notches on S. and 1 notch on E. edges; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
- Land, mountainous.
- Soil, sandy loam; 2nd rate.
- Timber, aspen.
- Undergrowth, aspen sapplings and sage brush.
- Good grass for grazing.
- Mountainous land, or land covered with dense undergrowth, 80.00 chs.

East, on a random line bet. secs. 13 and 24.

- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.10 Intersect E. bdy. of Tp., 5 lks. N. of the re-established

Subdivision of T. 14 S., R. 15 E. -Continued.

- Chains cor. of secs. 13, 18, 19, and 24, heretofore described.
- Thence I run
 N. $89^{\circ}58'W.$, on a true line bet. secs. 13 and 24.
 Over mountainous land; through dense undergrowth; descend .
- 5.00 Bottom of hollow, 150 ft. below sec. cor., course N. $10^{\circ}E.$
 Ascend .
- 20.00 Top of ridge, 200 ft. above hollow, bears N. $10^{\circ}E.$ and
 S. $10^{\circ}W.$; descend .
- 40.05 Set a sandstone, 18x11x4 ins., 12 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of
 stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impractic-
 able.
- 55.25 Creek, 4 lks. wide, 3 ins. deep, in bottom of Summer House
 Canon, 300 ft. below ridge, course N. $60^{\circ}E.$; ascend .
- 80.10 The cor. of secs. 13, 14, 23, and 24 .
 Land, mountainous.
 Soil, gravelly and rocky; 3rd and 4th rate.
 No timber.
 Undergrowth, sage, service berry and deer brush.
 Good grass for grazing.
 Mountainous land, or land covered with dense under-
 growth, 80.10 chs.

July 20, 1902.

July 21, 1902: At 7 h 2 m a.m., l.m.t., I set off $39^{\circ}36'N.$
 on the lat. arc; $20^{\circ}37'N.$, on the decl. arc; and determine
 a true meridian, with the solar, at the cor. of secs.
 13, 14, 23, and 24.

Thence I run

N. $0^{\circ}01'W.$, bet. secs. 13 and 14.

Over mountainous land; through dense undergrowth; descend .

- 23.00 Creek, 2 lks. wide, 1 in. deep, in bottom of canon, 200 ft.
 below sec. cor., course S. $80^{\circ}E.$; ascend .

Subdivision of T.14 S., R.15 E. -Continued.

Chains

40.00 Set a limestone, 22x10x4 ins., 16 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; from which

A lone pine, 4 ins. diam., bears N. 48° W., 128 lks. dist., marked $\frac{1}{2}$ S. 14, B. T.

No other trees within limits; raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

65.00 Top of ridge, 200 ft. above canon, bears N. E. and S. W.; descend.

80.00 Set a limestone, 22x8x4 ins., 16 ins. in the ground; for cor. of secs. 11, 12, 13, and 14, marked with 4 notches on S. and 1 notch on E. edges; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, mountainous.

Soil, black loam and gravelly; 1st and 3rd rate.

No timber.

Undergrowth, sage and deer brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth, 80.00 chs.

S. 89° 58' E., on a random line bet. secs. 12 and 13.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.16 Intersect E. bdy. of Tp., 19th N., of the re-established cor. of secs. 7, 12, 13, and 18, heretofore described.

Thence I run

N. 89° 50' W. on a true line bet. secs. 12 and 13.

Over mountainous land; through dense undergrowth; descend.

3.25 Enter aspen sapplings, bears N. E. and S. W.

6.50 Bottom of hollow, 30 ft. below sec. cor., course N. 60° E.; ascend.

7.00 Leave aspen sapplings, bears N. 30° E. and S. 30° W.

40.08 Set a limestone, 24x10x4 ins., 18 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

Subdivision of T.14 S., R.15 E. -Continued.

Chains able.

73.00 Top of ridge, 400 ft. above hollow, bears N. 60° E. and S. 30° W.; descend .

80.16 The cor. of secs. 11, 12, 13, and 14.

Land, mountainous.

Soil, black loam and gravelly; 1st and 3rd rate.

No timber.

Undergrowth, sage and deer brush and aspen sapplings.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth, 80.16 chs.

N. 0° 01' W., bet. secs. 11 and 12.

Over mountainous land; through dense undergrowth; descend .

17.00 Enter scattering pine timber, bears E. and W.

34.50 Creek, 6 lks. wide, 7 ins. deep, rapid current, in bottom of Flat Canon, 600 ft. below sec. cor., course N. 60° E.; ascend over sandstone boulders .

40.00 Set a sandstone, 18x10x4 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{2}$ on W. face; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

46.85 Ledge of oil shale and oil sandstone, 30 ft. high, bears N. 75° W. and S. 75° E. Leave boulders , bears same .

71.00 Top of ridge, 600 ft. above canon, bears N. 65° E. and S. 65° W.; descend .

80.00 Set a limestone, 18x10x4 ins., 12 ins. in the ground, for cor. of secs. 1, 2, 11, and 12, marked with 5 notches on S.

and 1 notch on E. edges; and raise a mound of stone,

2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, mountainous.

Soil, black loam and rocky; 1st and 4th rate.

Timber, pine.

Undergrowth, sage, service berry and mahogany brush.

Good grass for grazing.

Subdivision of T.14 S., R.15 E., -Continued.

Chains Mountainous land, or land covered with dense undergrowth, 80.00 chs.

July 21, 1902: At this cor. I set off $20^{\circ}34'N.$, on the decl. arc; and at 0 h 2 m p.m., l.m.t., observe the sun on the meridian, the resulting lat. is $39^{\circ}37'N.$

S. $89^{\circ}50'E.$, on a random line bet. secs. 1 and 12.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.20 Intersect E. bdy. of Tp., at the re-established cor. of secs. 1, 6, 7, and 12, heretofore described.

Thence I run

N. $89^{\circ}50'W.$, on a true line bet. secs. 1 and 12.

Over mountainous land; through heavy timber; descend .

11.00 Bottom of Bishops' Canon, 300 ft. below sec. cor., course S.E.; ascend abruptly .

27.61 Top of ridge, 300 ft. above canon, bears N.W. and S.E.; descend along side of ridge. Leave timber.

40.10 Set a sandstone, 20x10x4 ins., 15 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

60.00 Top of ridge, bears N. $80^{\circ}E.$ and S. $70^{\circ}W.$; descend .

80.20 The cor. of secs. 1, 2, 11, and 12.

Land, mountainous.

Soil, gravelly loam and stony; 2nd and 4th rate.

Timber, pine .

Good grass for grazing.

Mountainous or heavily timbered land, 80.20 chs.

N. $0^{\circ}01'W.$, on a random line bet. secs. 1 and 2.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.70 Intersect N. bdy. of Tp., 7 lks. E. of the re-established cor. of secs. 1, 2, 35, and 36, heretofore described.

Subdivision of T.14 S., R.15 E. -Continued.

- Chains Thence I run
 S.0°04'E., on a true line bet. secs. 1 and 2.
 Over mountainous land; through dense undergrowth; descend .
- 3.30 Bottom of Bishop's canon, 200 ft. below sec. cor., course S.E.; ascend .
- 39.70 Set a limestone, 18x11x4 ins., 12 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
- 49.00 Top of ridge, 250 ft. above canon, bears N.70°E. and S.70°W.; descend .
- 70.00 Bottom of hollow, 100ft. below ridge, course N.70°E.; ascend .
- 79.70 The cor. of secs. 1, 2, 11, and 12.
 Land, mountainous.
 Soil, gravelly and loam; 2nd and 3rd rate.
 No timber.
 Undergrowth, sage brush.
 Good grass for grazing.
 Mountainous land, or land covered with dense undergrowth, 79.70 chs.

July 21, 1902.

July 22, 1902: At 7 h 2 ma. m., 1. m. t., I set off 39°33'N., on the lat. arc; 20°26'N., on the decl. arc; and determine a true meridian, with the solar, at the cor. of secs. 2, 3, 34, and 35, on S. bdy. of Tp., heretofore described as reestablished by me.

I run

N.0°01'W., bet. secs. 34 and 35.

Over mountainous land, through scattering timber; descend .

- 9.00 Enter grove of pines, bears E. and W.
- 12.00 Leave pine grove, bears E. and W.
- 18.00 Creek, 6 lks. wide, 7 ins. deep, rapid current, in bottom

Subdivision of T. 14 S., R. 15 E. -Continued.

Chains of Bear Canon, 500 ft. below sec. cor., course S. E.; ascend :

40.00 Set a sandstone, 24x16x4 ins., 18 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

47.50 Top of ascent, 600 ft. above canon, bears E. and W.; thence over rolling mesa. Enter dense undergrowth.

70.00 Leave mesa, bears E. and W.:

Enter heavy pine and aspen timber, bears E. and W.; descend.

80.00 Set a sandstone, 20x10x4 ins., 15 ins. in the ground, for cor. of secs. 26, 27, 34, and 35, marked 1 notch on S. and 2 notches on E. edges; from which

An aspen, 4 ins. diam., bears N. 17° E., 63 lks. dist., marked T. 14 S., R. 15 E., S. 26, B. T.

A pine, 5 ins. diam., bears S. 3° E., 85 lks. dist., marked T. 14 S., R. 15 E., 35, B. T.

A pine, 10 ins. diam., bears S. 30° W., 54 lks. dist., marked T. 14 S., R. 15 E., S. 34, B. T.

An aspen, 4 ins. diam., bears N. 48° W., 65 lks. dist., marked T. 14 S., R. 15 E., S. 27, B. T.

Land, mountainous and rolling mesa.

Soil, black loam and gravelly; 1st and 3rd rate.

Timber, pine and aspen.

Undergrowth, sage and deer brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

East, on a random line bet. secs. 26 and 35.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.10 Intersect N. and S. line, 16 lks. N. of the cor. of secs. 25, 26, 35, and 36.

Thence I run

N. 89° 53' W., on a true line bet. secs. 26 and 35.

Subdivision of T.14 S., R.15 E. -Continued.

- Chains Over rolling mesa; through dense undergrowth; descend gently.
- 24.00 Enter aspen, sapplings, bears N.70°W. and S.70°E.:
- 30.00 Edge of mesa, bears N.80°E. and S.80°W.; descend .
- 40.05 Set a sandstone, 18x10x4 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from which
- An aspen, 4 ins. diam., bears N.38°E., 20 lks. dist., marked $\frac{1}{4}$ S.26, B.T.
- An aspen, 4 ins. diam., bears S.53°W., 8 lks. dist., marked $\frac{1}{4}$ S.35, B.T.
- 42.50 Bottom of hollow, 200 ft. below mesa, course N; ascend .
- 46.50 Top of ridge, 40 ft. above hollow, bears N. and S.; descend.
- 64.70 Creek, 1 lks. wide, 2 ins. deep, in bottom of hollow, 100 ft. below ridge, course N; ascend .
- 80.10 The cor. of secs. 26, 27, 34, and 35.
- Land, mountainous and rolling mesa.
- Soil, black loam and gravelly; 1st and 3rd rate.
- Timber, aspen.
- Undergrowth, aspen sapplings and sage brush.
- Good grass for grazing.
- Mountainous land, or land covered with dense undergrowth, 80.10chs.
-
- N.0°01'W., bet. secs. 26 and 27.
- Over mountainous land; through heavy timber; descend .
- 17.00 Creek, 5 lks. wide, 6 ins. deep, rapid current, in bottom of Rock Canon, 250 ft. below sec. cor., course E.; ascend .
- 18.00 Leave timber, bears E. and W.
- 28.25 Top of ridge, 200 ft. above canon, bears N.60°W. and S.60°E.; Enter aspen sapplings . Descend .
- 33.00 Leave aspen sapplings and enter heavy pine and aspen timber, bears E. and W.
- 39.50 Bottom of hollow, 100 ft. below ridge, course S.E.; ascend .

Subdivision of T.14 S., R.15 E.-Continued.

Chains

- 40.00 Set a sandstone, 20x10x4 ins., 15 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{4}$ on W. face; from which
- An aspen, 4 ins. diam., bears N. 19° 30' E., 23 lks. dist., marked $\frac{1}{4}$ S. 26, B.T.
- An aspen, 4 ins. diam., bears S. 49° W., 18 lks. dist., marked $\frac{1}{4}$ S. 27, B.T.
- 56.50 Top of ascent, edge of mesa, bears N. 80° W. and S. 80° E.; thence over mesa.
- 70.50 Leave aspen timber and enter dense undergrowth, bears E. and W.
- 80.00 Set a sandstone, 18x10x4 ins., 12 ins. in the ground, for cor. of secs. 22, 23, 26, and 27, marked with 2 notches on S. and 2 notches on E. edges; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
- Land, mountainous and rolling mesa.
- Soil, black loam and gravelly; 1st and 3rd rate.
- Timber, pine and aspen.
- Undergrowth, sage and deer brush and aspen sapplings.
- Good grass for grazing.
- Mountainous land, or heavily timber, or land covered with dense undergrowth, 80.00 chs.
- July 22, 1902: At this cor. I set off 20° 22' N., on the decl. arc; and at 6 h 2 m p.m., l.m.t., observe the sun on the meridian, the resulting lat. is 39° 35' N.
-
- S. 89° 53' E., on a random line bet. secs. 23 and 26.
- 40.00 Set temp. $\frac{1}{2}$ sec. cor.
- 79.90 Intersect N. and S. line, 21 lks. S. of the cor. of secs. 23, 24, 25, and 26.
- Thence I run
- S. 89° 58' W., on a true line bet. secs. 23 and 26.
- Over mountainous land; through dense undergrowth; descend.

Subdivision of T.14 S., R.15 E. -Continued.

Chains

- 12.75 Enter heavy pine timber, bears N. and S.
- 18.50 Leave pine timber, bears N. and S.
- 37.00 Bottom of hollow, 300 ft. below sec. cor., course S. 20° E.
Ascend .
- 39.95 Set a sandstone, 18x9x4 ins., 12 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of
stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impractic-
able.
- 42.00 Enter aspen sapplings, bears N. and S.
- 43.50 Leave aspen sapplings, bears N. and S.
- 71.00 Enter heavy aspen timber; Edge of mesa, bears N. and S.
- 75.00 Leave timber, bears N.W. and S.E.
- 79.90 The cor. of secs. 22, 23, 26, and 27.
Land, mountainous and mesa.
Soil, black loam and gravelly; 1st and 3rd rate.
Timber, pine and aspen.
Undergrowth, sage and deer brush.
Good grass for grazing.
Mountainous or heavily timbered land, or land covered
with dense undergrowth, 79.90 chs.
-
- N. 0° 01' W., bet. secs. 22 and 23.
Over rolling mesa; through dense undergrowth; descend
gently.
- 11.50 Leave mesa, bears E. and W.; descend .
- 11.60 Enter aspen sapplings, bears E. and W.
- 13.00 Leave aspen sapplings, bears E. and W.
- 23.50 Enter aspen sapplings, bears N.E. and S.W.
- 33.50 Bottom of hollow, 300 ft. below mesa, course N.E.; as-
cend .
- 40.00 Set a sandstone, 18x11x4 ins., 15 ins. in the ground for
 $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; from which
An aspen, 4 ins. diam., bears S. 80° E., 32 lks.
dist., marked $\frac{1}{4}$ S. 33, B.T.
An aspen, 4 ins. diam., bears N. 73° W., 55 lks.

Subdivision of T.14 S., R.15 E., -Continued.

Chains dist., marked $\frac{1}{4}$ S.22, B.T.

48.00 Top of ridge, 500 ft. above hollow, bears N.70° E. and S.70° W.; descend .

63.85 Creek, 2 lks. wide, 3 ins. deep, in bottom of Summer House Canon, 350 ft. below ridge, course S.80° E.; ascend .

— 80.00 Set a sandstone, 30x12x5 ins., 22 ins. in the ground, for cor. of secs. 14, 15, 22, and 23, marked with 3 notches on S. and 2 notches on E. edges; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, mountainous and rolling .

Soil, gravelly loam and stony; 2nd and 3rd rate.

Timber, pine and aspen.

Undergrowth, sage and deer brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth, 80.00 chs.

N.89°58'E., on a random line bet. secs. 14 and 23.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.18 Intersect N. and S. line, 19 lks. S. of the cor. of secs. 13, 14, 23, and 24.

Thence I run

S.89°50'W., on a true line bet. secs. 14 and 23 .

Over mountainous land; through dense undergrowth; ascend along side of ridge .

40.09 Set a sandstone, 18x12x4 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise - a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

43.50 Enter scattering aspen timber, bears N. and S.

53.50 Leave timber, bears N. and S.

60.00 Top of ridge, 200 ft. above sec. cor., bears N.80° W. and S.80° E.; descend .

65.50 Enter pine timber, bears N. and S.

Subdivision of T.14 S., R.15 E. -Continued.

Chains

73.00 Leave timber, bears N. and S.

80.18 The cor. of secs. 14, 15, 22, and 23.

Land, mountainous . . .

Soil, gravelly; 3rd rate.

Timber, pine and aspen.

Undergrowth, sage and deer brush and mahogany.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.18 chs.

July 22, 1902.

July 23, 1902: At 7 h 3 m a.m., l.m.t., I set off $39^{\circ}36'$ N., on the lat. arc; $20^{\circ}14'N.$, on the decl. arc; and determine a true meridian, with the solar, at the cor. of secs. 14, 15, 22, and 23.

Thence I run

 $N.0^{\circ}01'W.$, bet. secs. 14 and 15.

Over mountainous land; through dense undergrowth; ascend .

6.00 Top of ridge, 50 ft. above sec. cor., bears $N.80^{\circ}E.$ and $S.80^{\circ}W.$; descend .

18.00 Enter dense aspen sapplings, bears E. and W.

32.85 Bottom of hollow, 150 ft. below ridge, course E.; ascend .

40.00 Set a sandstone, $24 \times 8 \times 4$ ins., 18 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; from which

An aspen, 4 ins. diam., bears $N.24^{\circ}E.$, 100 lks. dist., marked $\frac{1}{4}$ S. 14, B.T.

An aspen, 4 ins. diam., bears $S.56^{\circ}W.$, 88 lks. dist., marked $\frac{1}{4}$ S. 15, B.T.

43.25 Leave aspen sapplings, bears E. and W.

46.00 Top of ridge, 150 ft. above hollow, bears E. and W.; descend .

49.00 Enter aspen sapplings, bears E. and W.

Subdivision of T.14 S., R.15 E.-Continued.

Chains

- 56.00 Bottom of hollow, 140 ft. below ridge, course N.E.; ascend .
- 80.00 Set a limestone, 20x12x4 ins., 15 ins. in the ground, for cor. of secs. 10, 11, 14, and 15, marked with 4 notches on S. and 2 notches on E. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
- Land, mountainous.
- Soil, black loam and gravelly; 1st and 3rd rate.
- No timber.
- Undergrowth, oak, sage and deer brush, and aspen sapplings.
- Good grass for grazing.
- Mountainous land, or land covered with dense undergrowth, 80.00 chs.
-
- N. 89° 50' E., on a random line bet. secs. 11 and 14.
- 40.00 Set temp. ¼ sec. cor.
- 80.10 Intersect N. and S. line, 23 lks. N. of the cor. of secs. 11, 12, 13, and 14.
- Thence I run
- West, on a true line bet. secs. 11 and 14.
- Over mountainous land; through dense undergrowth; descend .
- 15.50 Bottom of hollow, 50 ft. below sec. cor., course N. 20° E.; ascend .
- 27.00 Top of ridge, 40 ft. above hollow, bears N. 10° E. and S. 10° W.; descend .
- 35.50 Bottom of hollow, 80 ft. below ridge, course N. 20° E.; ascend .
- 40.05 Set a sandstone, 24x8x4 ins., 18 ins. in the ground, for ½ sec. cor., marked ½ on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
- 52.00 Top of ridge, 120 ft. above hollow, bears N. 30° E. and S. 30° W.; descend .

Subdivision of T.14 S.,R.15 E.-Continued.

Chains

68.00 Bottom of hollow,120 ft.below ridge,course N.E.;ascend .

80.10 The cor.of secs.10,11,14,and 15.

Land,mountainous.

Soil,black loam and gravelly;1st and 3rd rate.

No timber.

Undergrowth,sage and deer brush.

Good grass for grazing.

Mountainous land;or land covered with dense undergrowth,

80.10 chs.

N.0°01'W.,bet.secs.10 and 11.

Over mountainous land;through dense undergrowth;ascend .

8.50 Top of ridge,100 ft.above sec.cor.,bears N.E.and S. W.;descend .

35.15 Creek,5 lks.wide,6 ins.deep,in bottom of Flat Canon, 500 ft.below ridge,course E.;ascend .

40.00 Set a limestone,24x10x4 ins.,18 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ on W.face;from which

A lone aspen,4 ins.diam.,bears N.85°W.,47

lks.dist.,marked $\frac{1}{4}$ S.10,B.T.

No other trees;raise a mound of stone,2 ft.base,

1 $\frac{1}{2}$ ft.high,W.of cor.Pits impracticable.

80.00 Set a sandstone,24x10x5 ins.,18 ins.in the ground,for cor.of secs.2,3,10,and 11,marked with 5 notches on S.

and 2 notches on E.edges;and raise a mound of stone,2 ft.base,1 $\frac{1}{2}$ ft.high,W.of cor.Pits impracticable.

Land,mountainous .

Soil,black loam and gravelly;1st and 3rd rate.

No timber.

Undergrowth,sage brush and deer brush.

Good grass for grazing.

Subdivision of T.14 S., R.15 E. -Continued.

Chains Mountainous land, or land covered with dense undergrowth, 80.00 chs.

July 23, 1902: At this cor. I set off $20^{\circ}10'N.$, on the decl. arc; and at 0 h 2 m p.m., l.m.t., observe the sun on the meridian, the resulting lat. is $39^{\circ}37'N.$

East, on a random line bet. secs. 2 and 11.

40.00 Set temp. $\frac{3}{4}$ sec. cor.

79.84 Intersect N. and S. line, at the cor. of secs. 1, 2, 11, and 12.

Thence I run

West, on a true line bet. secs. 2 and 11.

Over mountainous land; through dense undergrowth; ascend along side of ridge.

39.92 Set a sandstone, $24 \times 10 \times 4$ ins., 18 ins. in the ground, for $\frac{3}{4}$ sec. cor., marked $\frac{3}{4}$ on N. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

57.00 Top of ridge, 250 ft. above sec. cor., bears N.W. and S.E. Descend.

68.00 Bottom of hollow, 80 ft. below ridge, course S. $20^{\circ}E.$; ascend.

79.84 The cor. of secs. 2, 3, 10, and 11.

Land, mountainous.

Soil, black loam and gravelly; 1st and 3rd rate.

No timber.

Undergrowth, sage and deer brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth, 79.84 chs.

N. $0^{\circ}01'W.$, on a random line bet. secs. 2 and 3.

40.00 Set temp. $\frac{3}{4}$ sec. cor.

79.90 Intersect N. bdy. of Tp. 2 lks. E. of the re-established

Subdivision of T.14 S., R.15 E. -Continued.

Chains cor. of secs. 2, 3, 34, and 35, heretofore described.

Thence I run
 S.0°02'E., on a true line bet. secs. 2 and 3.

Over rolling mesa; through dense undergrowth; descend
 gently .

17.50 Leave mesa, bears N.E. and S.W. Descend.

28.00 Head of Bishop's Canon, 150 ft. below mesa, course
 N.E.; ascend .

39.90 Set a sandstone, 22x12x6 ins., 16 ins. in the ground, for
 $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; and raise a mound of
 stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impractic-
 able.

60.00 Top of ridge, 100 ft. above canon, bears N.80°E. and S.
 80°W.; descend .

79.90 The cor. of secs. 2, 3, 10, and 11.

Land, mountainous and rolling mesa.

Soil, black loam; 1st rate.

No timber.

Undergrowth, sage and deer brush.

Good grass for grazing.

Mountainous land, or land covered with dense under-
 growth, 79.90 chs.

July 23, 1902.

July 24, 1902: At 7 h 2 m a.m., l.m.t., I set off 39°33'
 N., on the lat. arc; 20°01' N., on the decl. arc; and de-
 termine a true meridian with the solar, at the cor. of
 secs. 3, 4, 33, and 34, heretofore described and established
 by me in resurvey of S. bdy. of Tp.

Thence I run

N.0°02'W., bet. secs. 33 and 34.

Over mountainous land; through heavy timber; descend .

2.60 Bottom of Bear Canon, 100 Ft. below sec. cor., course
 N.E.; ascend .

35.00 Top of ridge, 400 ft. above canon, bears N.E. and S.W.;
 descend .

Subdivision of T.14 S., R.15 E.-Continued.

Chains

40.00 Set a sandstone, 15x10x6 ins., 15 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; from which

An aspen, 5 ins. diam., bears N.20°E., 18 lks. dist., marked $\frac{1}{4}$ S.34, B.T.

An aspen, 7 ins. diam., bears N.20°W., 32 lks. dist., marked $\frac{1}{4}$ S.33, B.T.

43.00 From this point North Bear Spring is about 18.00 chs. East, cannot be seen from line.

54.00 Bottom of hollow, 50 ft. below ridge, course N.65°E.,; ascend.

63.00 Leave timber, bears E. and W.

67.50 Top of ridge, 100 ft. above hollow, bears E. and W.; descend.

71.75 Enter heavy pine and aspen timber, bears E. and W.

80.00 A pine, 4 ins. diam., for cor. of secs. 27, 28, 33, and 34,

I mark

T.14 S.S.27, on N.E.

R.15 E., S.34, on S.E.,

S.33, on S.W., and

S.28, on N.W. sides; with 1 notch on S. and 3 notches on E. sides; from which

A pine, 6 ins. diam., bears N.61°E., 42 lks. dist., marked T.14 S., R.15 E., S.27, B.T.

A pine, 15 ins. diam., bears S.55°E., 40 lks. dist., marked T.14 S., R.15 E., S.34, B.T.

A pine, 14 ins. diam., bears S.54°W., 60 lks. dist., marked T.14 S., R.15 E., S.33, B.T.

A pine, 5 ins. diam., bears N.47°W., 45 lks. dist., marked T.14 S., R.15 E., S.28, B.T.

Land, mountainous.

Soil, black loam; 1st rate.

Timber, pine and aspen.

Undergrowth, sage and deer brush.

Good grass for grazing.

Mountainous or heavily timbered land, 80.00 chs.

Subdivision of T.14 S., R.15 E.-Continued.

Chains

East, on a random line bet. secs. 27 and 34.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.00 Intersect N. and S. line, at the cor. of secs. 26, 27, 34, and 35.

Thence I run

West, on a true line bet. secs. 27 and 34.

Over mountainous land; through scattering pine and aspen timber; ascend gradually along north slope of ridge.

40.00 Set a sandstone, 24x14x5 ins., 18 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from which

A pine, 4 ins. diam., bears N. 19° W., 30 lks. dist., marked $\frac{1}{4}$ S. 27, B.T.

A pine, 5 ins. diam., bears S. 23° E., 40 lks. dist., marked $\frac{1}{4}$ S. 34, B.T.

71.50 Enter heavy pine timber, bears N. and S.

80.00 The cor. of secs. 27, 28, 33, and 34.

Land, mountainous.

Soil, black loam; 1st rate.

Timber, pine and aspen.

No undergrowth.

Good grass for grazing.

Mountainous or heavily timbered land, 80.00 chs.

N. 0° 02' W., bet. secs. 27 and 28.

Over mountainous land; through heavy timber; descend.

21.20 Creek, 3 lks. wide, 3 ins. deep, in bottom of Rock Canon, 250 ft. below sec. cor., course S. 80° E.; ascend.

21.80 A spring of good water bears W. about 1.50 chs. dist.

22.00 Leave timber, bears E. and W.

40.00 Set a sandstone, 24x10x5 ins., 18 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Subdivision of T.14 S., R.15 E., -Continued.

Chains

65.00 Enter heavy aspen timber, bears E. and W.

72.50 Top of ridge, 400 ft. above canon, bears N.W. and S.E.;
descend .

80.00 Set a sandstone, 14x10x5 ins., 9 ins. in the ground, for
cor. of secs. 21, 22, 27, and 28, marked with 2 notches on
S. and 3 notches on E. edges; from which

An aspen, 8 ins. diam., bears N. 58° E., 60 lks.
dist., marked T.14 S., R.15 E., S.22, B.T.

An aspen, 6 ins. diam., bears S. 35° E., 30 lks.
dist., marked T.14 S., R.15 E., S.27, B.T.

An aspen, 8 ins. diam., bears S. 50° W., 15 lks.
dist., marked T.14 S., R.15 E., S.28, B.T.

An aspen, 10 ins. diam., bears N. 20° W., 65 lks.
dist., marked T.14 S., R.15 E., S.21, B.T.

Land, mountainous.

Soil, black loam; 1st rate.

Timber, pine and aspen.

Undergrowth, sage and deer brush.

Good grass for grazing.

Mountainous or heavily timbered land, 80.00 chs.

July 24, 1902: At this cor. I set off 19° 58' N., on the
decl. arc; and at 0 h 2 m p.m., l.m.t., observe the sun
on the meridian, the resulting lat. is 39° 35' N.

East, on a random line bet. secs. 22 and 27.

40.00 - Set temp. $\frac{1}{4}$ sec. cor.

80.20 Intersect \ddot{N} . and S. line, 19 lks. N. of the cor. of secs.
22, 23, 26, and 27.

Thence I run

N. 89° 52' W., on a true line bet. secs. 22 and 27.

Over rolling mesa; through dense undergrowth; descend
gently.

30.00 Leave mesa, bears N. and S.; descend .

32.50 Bottom of hollow, 32 ft. below mesa, course S.; ascend .

Subdivision of T.14 S., R.15 E.-Continued.

Chains

33.00 Leave undergrowth and enter heavy aspen timber, bears N. and S.

40.10 Set a sandstone, 22x12x4 ins., 16 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from which

An aspen, 4 ins. diam., bears S. 70° E., 15 lks.

dist., marked $\frac{1}{4}$ S. 27, B.T.

An aspen, 8 ins. diam., bears N. 35° W., 20 lks.

dist., marked $\frac{1}{4}$ S. 22, B.T.

60.00 Top of ridge, 200 ft. above hollow, bears N.E. and S.W.
Descend .

80.20 The cor. of secs. 21, 22, 27, and 28.

Land, mountainous and mesa.

Soil, black loam ; 1st rate.

Timber, aspen.

Undergrowth, sage and deer brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.20 chs.

N. 0° 02' W., bet. secs. 21 and 22.

Over mountainous land; through heavy aspen timber; descend .

26.50 Bottom of hollow, 200 ft. below sec. cor., course N.E.; ascend .

27.00 Leave timber, bears N.E. and S.W.

31.00 Top of ridge, 50 ft. above hollow, bears N.E. and S.W.; descend .

39.00 Spring branch, 1 lk. wide, 2 ins. deep, course E., on face of ridge; the spring is 25 lks. west of line .

40.00 Set a sandstone, 24x8x8 ins., 16 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

45.50 Creek, 2 lks. wide, 2 ins. deep, in hollow, 50 ft. below ridge, course S. 70° E.; ascend .

Subdivision of T.14 S., R.15 E., -Continued.

Chains

- 45.60 A spring about N.80°W, about 15.00 chs. dist., cannot be seen from line .
- 60.00 Top of ridge, 50 ft. above hollow, bears E. and W.; descend .
- 71.00 Enter dense aspen sapplings, bears N.W. and S.E.
- 78.00 Leave aspen sapplings, bears N.W. and S.E.
- 79.50 Bottom of hollow, 100 ft. below ridge, course S.E.; ascend .
- 80.00 Set a sandstone, 18x12x4 ins., 12 ins. in the ground, for cor. of secs. 15, 16, 21, and 22, marked 14 S., on N.E. and 15 E., on S.E. faces; with 3 notches on S. and 3 notches on E. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high W. of cor. Pits. impracticable. Land, mountainous. Soil, black loam; 1st rate. Timber, aspen. Undergrowth, aspen. Mountainous or heavily timbered land, land covered with dense undergrowth 80.00 chs.
- July 24, 1902: At this cor. I set off 39°36' N. on the lat. arc; 19°56' N., on the decl. arc; and at 5 h 3 m p.m., l.m.t., I determine a true meridian, with the solar, and mark a point thereof on a stone, firmly set in the ground, 5.00 chs. N. of cor.
- At 11 h 19 m p.m., l.m.t., I observe Polaris at eastern elongation, in accordance with the Manual, and mark a point in the line thus determined, by a tack driven in a wooden plug set in the ground, east of the stone, already set 5.00 chs. N. of the cor.

July 24, 1902.

July 25, 1902: At 6 h 30 m a.m., l.m.t., I lay off the azimuth of Polaris 1°35' to the west, and mark a point in the true meridian thus determined, by cutting a small groove in the stone, already set 5.00 chs. N. of the cor.; this mark falls 0.27 ins. east of the true meridian determined with the solar .

At 7 h 2 m a.m., l.m.t., I set off 39°36' N., on the lat. arc; 19°49' N., on the decl. arc; and mark a point in the true meridian, determined with the solar, by a cross on the stone already set, 5.00 chs. N. of the cor.; this

Subdivision of T.14 S., R.15 E.-Continued.

Chains mark falls 0.23 ins. east of the true meridian established by Polaris observation.

The solar apparatus by p.m. and a.m. observations, defines position for true meridians, respectively, about 0'14" west and 0'12" east of the true meridian established by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 8 h 0 m a.m., l.m.t., is $16^{\circ} 9.7' W.$, the angle thus determined, reduced by the table page 100 of the Manual, gives the mean mag. decl. $16^{\circ} 04' E.$

Thence I run

S. $89^{\circ} 52' E.$, on a random line bet. secs. 15 and 22.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

80.38 Intersect N. and S. line, 10 lks. S. of the cor. of secs. 14, 15, 22, and 23.

Thence I run

N. $89^{\circ} 56' W.$, on a true line bet. secs. 15 and 22.

Over mountainous land; through dense undergrowth; descend.

40.19 Set a sandstone, 18x8x4 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

80.38 The cor. of secs. 15, 16, 21, and 22.

Land mountainous.

Soil, gravelly loam; 2nd rate.

No timber.

Undergrowth, sage and deer brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth, 80.38 chs.

A spring of good water bears S.E. about 15.00 chs., not visible from line.

Subdivision of T.14 S., R.15 E.-Continued.

Chains

N.0°02'W., bet. secs. 15 and 16.

Over mountainous land; through dense undergrowth; ascend .

17.50 Top of ridge, 40 ft. above sec. cor., bears E. and W.; descend .

24.50 Enter dense aspen sapplings, bears E. and W.

39.50 A spring (not seen from line) bears S. 20° E., about 15.00 chs. dist.

40.00 Set a sandstone, 20x8x5 ins., 15 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; from which

An aspen, 5 ins. diam., bears N. 53° E., 51 lks. dist., marked $\frac{1}{4}$ S. 15, B.T.

An aspen, 6 ins. diam., bears S. 49° W., 80 lks. dist., marked $\frac{1}{4}$ S. 16, B.T.

40.50 Spring branch, 1 lk. wide, 1 in. deep, in bottom of hollow, 100 ft. below ridge, course N. 5° W.; ascend .

53.20 Same hollow, course N. 3° E. (no water); ascend .

80.00 Set a sandstone, 20x8x4 ins., 15 ins. in the ground, for cor. of secs. 9, 10, 15, and 16, marked with 4 notches on S. and 3 notches on E. edges; from which

An aspen, 4 ins. diam., bears N. 29° E., 18 lks. dist., marked T. 14 S., R. 15 E., S. 10, B.T.

An aspen, 14 ins. diam., bears S. 51° E., 110 lks. dist., marked T. 14 S., R. 15 E., S. 15, B.T.

An aspen, 4 ins. diam., bears S. 20° W., 17 lks. dist., marked T. 14 S., R. 15 E., S. 16, B.T.

An aspen, 4 ins. diam., bears N. 38° W., 48 lks. dist., marked T. 14 S., R. 15 E., S. 9, B.T.

Land, mountainous .

Soil, sandy loam ; 2nd rate.

Timber, aspen.

Undergrowth , sage and deer brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth, 80.00 chs.

Subdivision of T.14 S., R.15 E. -Continued.

- Chains
- S. $89^{\circ}56'E.$, on a random line bet. secs. 10 and 15.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.26 Intersect N. and S. line, at the cor. of secs. 10, 11, 14, and 15.
- Thence \checkmark I run
- N. $89^{\circ}56'W.$, on a true line bet. secs. 10 and 15.
- Over mountainous land; through dense undergrowth; ascend .
- 8.00 Top of ridge, 75 ft. above sec. cor., bears N.E. and S.W.; descend ;
- 23.00 Bottom of hollow, 180 ft. below ridge, course N.E.
- A small spring bears N. 10 lks. dist.
- Enter dense aspen sapplings and leave sage brush, bears N. and S.; ascend .
- 30.50 Leave aspen sapplings and enter dense sage brush, bears N. $30^{\circ}W.$ and S. $30^{\circ}E.$
- 34.00 Top of ridge, 100 ft. above hollow, bears N.E. and S.W.; descend .
- 40.13 Set a limestone, 20x12x4 ins., 15 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
- 50.00 Leave undergrowth and enter heavy aspen timber, bears N. and S.
- 52.00 Bottom of hollow, 200 ft. below ridge, course N. $10^{\circ}E.$
- Leave timber, bears N $10^{\circ}E.$ and S. $10^{\circ}W.$ Ascend .
- 57.50 Enter heavy aspen timber, bears N. $30^{\circ}E.$ and S. $30^{\circ}W.$
- 70.00 Top of ridge, 100 ft. above hollow, bears N. $10^{\circ}E.$ and S. $10^{\circ}W.$; descend .
- 79.60 Bottom of hollow, 150 ft. below ridge, course N.; ascend .
- 80.26 The cor. of secs. 9, 10, 15, and 16.
- Land, mountainous.
- Soil, black loam; 1st rate.
- Timber, aspen.
- Undergrowth, sage and deer brush and aspen sapplings.
- Good grass for grazing.

Subdivision of T.14 S., R.15 E. -Continued.

Chains Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.26 chs.

July 25, 1902: At the noon hour the sky is overcast and solar observations are impossible.

N.0°02'W., bet. secs. 9 and 10.

Over mountainous land; through heavy aspen timber; descend gently.

4.50 Creek, 4 lks. wide, 5 ins. deep, in bottom of Flat Canon, 20 ft. below sec. cor., course N.60°E.; ascend .

6.00 Leave timber, bears E. and W.

17.50 Top of ridge, 150 ft. above creek, bears N.60°W. and S.60°E.:

Enter scattering aspen timber, bears with ridge.

Descend .

26.90 Bottom of hollow, 80 ft. below ridge, course S.E.; ascend.

40.00 Set a limestone, 18x10x4 ins., 12 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which

A pine, 30 ins. diam., bears S.20°W., 175 lks. dist., marked $\frac{1}{2}$ S.9, B.T.

A pine, 8 ins. diam., bears N.45°E., 115 lks. dist., marked $\frac{1}{2}$ S.10, B.T.

42.00 Enter heavy pine timber, bears E. and W.

46.00 Leave timber, bears E. and W.

65.00 Top of ridge, 300 ft. above hollow, bears N.70°W. and S.70°E.:

Enter dense aspen sapplings, bears with ridge. descend.

80.00 Set a sandstone, 22x10x4 ins., 16 ins. in the ground, for cor. of secs. 3, 4, 9, and 10, marked with 5 notches on S. and 3 notches on E. edges; from which

An aspen, 5 ins. diam., bears N.28°E., 65 lks. dist., marked T.14 S., R.15 E., S.3, B.T.

An aspen, 5 ins. diam., bears S.51°E., 74 lks. dist., marked T.14 S., R.15 E., S.10, B.T.

No other trees within limits; raise a mound of stone,

Subdivision of T.14 S., R.15 E.-Continued.

Chains 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, mountainous.

Soil, black loam; 1st rate.

Timber, pine and aspen.

Undergrowth, aspen sapplings.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

S. $89^{\circ}56'E.$, on a random line bet. secs. 3 and 10.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.10 Intersect N. and S. line, 10 lks. S. of the cor. of secs. 2, 3, 10, and 11.

Thence I run

West, on a true line bet. secs. 3 and 10.

Over mountainous land; through dense undergrowth; ascend .

6.50 Top of ridge, 60 ft. above sec. cor., bears N. and S.; descend .

6.75 Enter scrub cedar and pinion pine timber, bears N. and S.

15.00 Leave timber, bears N. and S.

17.50 Bottom of hollow, 70 ft. below ridge, course S. $10^{\circ}E.$; ascend .

32.75 Top of ridge, 100 ft. above hollow, bears N. and S.; descend .

33.00 Enter scattering timber, bears N. and S.

40.05 Set a limestone, 20x15x4 ins., 15 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from which

A pine, 4 ins. diam., bears N. $17^{\circ}E.$, 46 lks.

dist., marked $\frac{1}{4}$ S. 3, B.T.

A pine, 7 ins. diam., bears S. $60^{\circ}E.$, 115 lks.

dist., marked $\frac{1}{4}$ S. 10, B.T.

48.00 Bottom of hollow, 100 ft. below ridge, course S.: A corral bears South about 2.00 chs. dist.

Subdivision of T.14 S., R.15 E.-Continued.

Chains

- 61.50 Top of ridge, 50 ft. above hollow, bears N. and S.
Enter aspen timber, bears N. and S. Descend .
- 66.50 Leave aspen timber, bears N. and S.
- 79.00 Bottom of hollow, 50. below ridge, course S. E.; ascend .
- 80.10 The cor. of secs. 3, 4, 9, and 10.
Land, mountainous.
Soil, black loam; 1st rate.
Timber, pine and aspen, pinion pine and cedar.
Undergrowth, sage and deer brush.
Good grass for grazing.
Mountainous or heavily timbered land, or land covered
with dense undergrowth, 80.10 chs.
-
- N. 0° 02' W., on a random line bet. secs. 3 and 4.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.00 Intersect N. bdy. of Tp., at the re-established cor. of
secs. 3, 4, 33, and 34, heretofore described.
Thence I run
S. 0° 02' E., on a true line bet. secs. 3 and 4.
Over mountainous land; through heavy timber; ascend .
- 1.50 Leave timber, bears E. and W. and enter dense under-
growth .
- 15.00 Top of ascent, 80 ft. above sec. cor., bears N. W. and S. E.;
thence over level mesa .
- 40.00 Set a sandstone, 24x12x4 ins., 18 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; and raise a mound of
stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impractic-
able.
- 50.00 Highest point on mesa; descend gradually.
- 61.20 Trail, bears E. and W.
- 77.50 Edge of mesa, bears N. 60° E. and W.; descend from mesa.
- 79.00 Bottom of hollow, 40 ft. below mesa, course S. E.; as-
cend .
- 80.00 The cor. of secs. 3, 4, 9, and 10.
Land, mountainous and level mesa.

Subdivision of T.14 S., R.15 E.-Continued.

Chains Soil, black loam; 1st rate.

Timber, pine and aspen.

Undergrowth, sage and dder brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

July 25, 1902.

July 26, 1902: At 7 h 2 m a.m., l.m.t., I set off $39^{\circ}33'$ N., on the lat. arc; $19^{\circ}36'$ N., on the decl. arc; and determine a true meridian, with the solar, at the re-established cor. of secs. 4, 5, 32, and 33, on S. bdy. of Tp, heretofore described.

Thence I run

$N.0^{\circ}03'W.$, bet. secs. 32 and 33.

Over mountainous land; through dense undergrowth; and scattering aspen timber; ascend.

5.85 Top of divide ridge between Bear and Rock canons, 100 ft. above sec. cor., bears N.E. and S.W.; descend.

40.00 An aspen, 5 ins. diam., for $\frac{1}{4}$ sec. cor., I mark $\frac{1}{4}$ S. 32 on W. and S. 33 on E. sides; from which

An aspen, 5 ins. diam., bears $S.45^{\circ}E.$, 18 lks. dist., marked $\frac{1}{4}$ S. 33, B.T.

An aspen, 5 ins. diam., bears $N.79^{\circ}W.$, 12 lks. dist., marked $\frac{1}{4}$ S. 32, B.T.

62.00 Dilapidated buck fence, bears $N.10^{\circ}E.$ and $S.25^{\circ}W.$

63.70 Creek, 3 lks. 2 ins. deep, in bottom of Rock Canon, 500 ft. below ridge, course N.E.; ascend.

65.50 Trail, bears $N.20^{\circ}E.$ and $S.20^{\circ}W.$

74.05 Top of ridge, 60 ft. above canon, bears N.E. and S.W.; descend.

79.65 Buck fence, bears N.W. and S.E.

80.00 Set a sandstone, $24 \times 12 \times 4$ ins., 10 ins. in the ground, for cor. of secs. 28, 29, 32, and 33, marked with 1 notch on S. and 4 notches on E. edges; from which

An aspen, 4 ins. diam., bears $N.78^{\circ}E.$, 130

Subdivision of T.14 S., R.15 E. -Continued.

Chains lks.dist.,marked T.14 S.,R.15 E.,S.28,B.T .
 As aspen,6 ins.diam.,bears S.65°E.,34 lks.
 dist.,marked T.14 S.,R.15 E.,S.33,B.T.
 An aspen,6 ins.diam.,bears S.59°W.,180 lks.
 dist.,marked T.14 S.,R.15 E.,S.32,B.T.
 An aspen,5 ins.diam.,bears N.38°W.,35 lks.
 dist.,marked T.14 S.,R.15 E.,S.29,B.T.

Land,mountainous.

Soil,black loam;1st rate.

Timber,pine and aspen.

Undergrowth,sage and deer brush.

Good grass for grazing.

Mountainous land,or land covered with dense under-
 growth,80.00 chs.

East,on a random line bet.secs.28 and 33.

40.00 Set temp. $\frac{1}{4}$ sec.cor.

80.00 Intersect N.and S.line,at the cor.of secs.27,28,33,
 and 34.

Thence I run

West,on a true line bet.secs.28 and 33.

Over mountainous land;through dense undergrowth and
 scattering timber;descend .

40.00 Set a sandstone,18x10x10 ins.12 ins.in the ground,for
 $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ on N.face;from which

A pine,4 ins.diam.,bears N.60°W.,26 lks.

dist.,marked $\frac{1}{4}$ S.28,B.T.

A pine,5 ins.diam.,bears S.34°E.,24 lks.

dist.,marked $\frac{1}{4}$ S.33,B.T.

41.00 Buck fence,bears N.70°E.and S.70°W.

44.00 Creek,2 lks.wide,6 ins.deep,in bottom of Rock Canon,
 400 ft.below sec.cor.,course N.60°E.;ascend .

71.00 Top of ridge,80 ft.above canon,bears N.and S.;des-
 cend .

79.50 Creek,1 lk.wide,2 ins.deep,in bottom of hollow,50 ft.

Subdivision of T.14 S., R.15 E..-Continued.

Chains below ridge, course S.E.; ascend .

80.00 The cor. of secs. 28, 29, 32, and 33.

Land, mountainous.

Soil, black loam; 1st rate.

Timber, pine and aspen.

Undergrowth, sage and aspen sapplings.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth, 80.00 chs.

N. 0° 03' W., bet. secs. 28 and 29.

Over mountainous land; through dense undergrowth and scattering timber; descend .

.20 Creek, 1 lk. wide, 2 ins. deep, in bottom of hollow, 10 ft. ft. below sec. cor., course S. 40° E.; ascend .

7.00 Leave timber, bears E. and W.

24.50 Top of ridge, 300 ft. above canon, bears E. and W.; descend .

35.00 Buck fence, bears N.E. and S.W.

36.00 Enter dead timber, bears N.W. and S.E.

40.00 Set a sandstone, 28x10x4 ins., 22 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

44.00 Bottom of hollow, 100 ft. below ridge, course N.E..
Leave dead timber, bears with ridge; ascend .

48.50 Enter scattering aspen timber, bears E. and W.

63.00 Top of ridge, 200 ft. above hollow, bears E. and W.; descend .

80.00 Set a sandstone, 24x8x5 ins., 18 ins. in the ground, for cor. of secs. 20, 21, 28, and 29, marked with 2 notches on S. and 4 notches on E. edges; from which

An aspen, 15 ins. diam., bears N. 37° E., 48 lks. dist., marked T. 14 S., R. 15 E., S. 21, B. T.

An aspen, 12 ins. diam., bears S. 56° E., 41 lks. dist., marked T. 14 S., R. 15 E., S. 28, B. T.

Subdivision of T.14 S., R.15 E. -Continued.

Chains An aspen, 7 ins. diam., bears S. 69° W., 142 lks.
 dist., marked T.14 S., R.15 E., S. 29, B.T.
 An aspen, 12 ins. diam., bears N. 53° W., 117 lks.
 dist., marked T.14 S., R.15 E., S. 20, B.T.

Land, mountainous .

Soil, black loam; 1st rate.

Timber, pine and aspen.

Undergrowth, sage and deer brush.

Good grass for grazing.

Mountainous land, or land covered with dense under-
 growth, 80.00 chs.

July 26, 1902: At this cor. I set off $19^{\circ} 32' N.$, on the
 decl. arc; and at 0 h 2 m p.m., l.m.t., observe the sun
 on the meridian, the resulting lat. is $39^{\circ} 35' N.$

East, on a random line bet. secs. 21 and 28.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.08 Intersect N. and S. line, 10 lks. N. of the cor. of secs.
 21, 22, 27, and 28.

Thence I run

N. $89^{\circ} 56' W.$, on a true line bet. secs. 21 and 28.

Over mountainous land; through dense undergrowth; and
 scattering timber; ascend .

6.00 Top of ridge, 50 ft. above sec. cor., bears N. W. and S. E.;
 descend .

20.00 Head of hollow, 50 ft. below ridge, course S. 10° W.; as-
 cend .

33.50 Top of ridge, 150 ft. above hollow, bears N. 35° E. and
 S. 35° W.; descend .

33.75 Leave timber, bears N. 35° E. and S. 35° W.

39.00 Trail, bears N. W. and S. E.

40.04 Set a sandstone, 18x10x4 ins., 12 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of
 stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impractic-
 able.

Subdivision of T.14 S., R.15 E. -Continued.

Chains

49.40 Bottom of canon, 150 ft. below ridge, course S. 60° E.; ascend .

52.00 Rock Spring bears N. 25 lks. dist., course N. E. , on mountain side.

53.25 Small spring bears S. 50 lks. dist. on side of mountain, course N; 1 lk. wide, 1 in. deep at this point.

54.50 Enter heavy pine and aspen timber, bears N. and S.

66.75 Leave timber, bears N. E. and S. W.

80.08 The cor. of secs. 20, 21, 28, and 29.

Land, mountainous .

Soil, black loam and rocky; 1st and 4th rate.

Timber, aspen and pine.

Undergrowth, sage brush .

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.08 chs.

N. 0° 03' W., bet. secs. 20 and 21.

Over mountainous land; through scattering timber and scattering undergrowth; descend .

7.00 Bottom of hollow, 50 ft. below sec. cor., course E.; ascend .

37.00 Top of ridge, 300 ft. above bottom of hollow, bears N. 20° E. and S. W.; descend .

40.00 Set a sandstone, 15x10x4 ins., 10 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; from which

An aspen, 5 ins. diam. bears S. 32° E., 224 lks. dist., marked $\frac{1}{4}$ S. 21, B. T.

An aspen, 11 ins. diam., bears N. 67° W., 220 lks. dist., marked $\frac{1}{4}$ S. 20, B. T.

42.50 Enter heavy pine and aspen timber, bears E. and W.

60.00 Leave timber, bears E. and W.

80.00 Set a sandstone, 18x14x4 ins., 12 ins. in the ground, for cor. of secs. 16, 17, 20, and 21, marked with 3 notches on S. and 4 notches on E. edges; and raise a mound of

Subdivision of T.14 S., R.15 E.-Continued.

Chains stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, mountainous.

Soil, black loam; 1st rate.

Timber, pine and aspen.

Undergrowth, sage and deer brush.

Good grass for grazing.

Mountainous or heavily timbered land, 80.00 chs.

S. $89^{\circ}56'E.$, on a random line, bet. secs. 16 and 21.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.14 Intersect N. and S. line, 15 lks. S. of the cor. of secs. 15, 16, 21, and 22.

Thence I run

S. $89^{\circ}58'W.$, on a true line bet. secs. 16 and 21.

Over mountainous land; through dense undergrowth; descend.

2.00 Bottom of hollow, 10 ft. below sec. cor., course S. E.; ascend.

2.30 Enter aspen sapplings, bears N. W. and S. E.

16.00 Leave aspen sapplings, bears N. and S.

22.25 Enter aspen sapplings, bears N. and S.

34.00 Leave aspen sapplings, bears N. and S.

37.00 Enter aspen, sapplings, bears N. and S.

40.07 Set a sandstone, 24x14x4 ins., 18 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

46.10 Leave aspen sappling, bears N. and S.

45.00 Enter aspen sapplings, bears N. and S.

60.00 Top of ridge, 400 ft. above sec. cor., bears N. E. and S. $20^{\circ}W.$; descend.

80.14 The cor. of secs. 16, 17, 20, and 21.

Land, mountainous.

Soil, black loam; 1st rate.

Timber, pine and aspen.

Subdivision of T.14 S., R.15 E. -Continued.

Chains

Undergrowth, sage and deer brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth, 80.14 chs.

July 26, 1902.

July 27, 1902: At 7 h 3 m a. m., l. m. t., I set off $39^{\circ} 36' N.$, on the lat. arc; $19^{\circ} 23' N.$, on the decl. arc; and determine a true meridian, at the cor. of secs. 16, 17, 20, and 21.

Thence I run

$N. 0^{\circ} 03' W.$, bet. secs. 16 and 17.

Over mountainous land; through scattering timber; descend.

8.25 Bottom of hollow, 50 ft. below sec. cor., course $N. 25^{\circ} E.$; ascend.

25.00 Two small springs bear 6.00 chs. and 8.00 chs. west respectively.

Enter dead aspen timber, bears E. and W.

40.00 Top of ridge, 150 ft. above hollow, bears $N. E.$ and $S. 20^{\circ} W.$

Set a sandstone, 15x10x5 ins., 10 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

41.50 Leave dead timber, bears E. and W.

44.00 Enter heavy timber, bears E. and W.

56.00 Creek, 4 lks. wide, 2 ins. deep, in bottom of Flat Canon, 200 ft. below ridge, course $N. 65^{\circ} E.$; ascend.

58.30 Top of ridge, 20 ft. above canon, bears E. and W.; descend.

60.00 Bottom of canon, 50 ft. below ridge, course $S. E.$; ascend.

62.00 Top of ridge, 50 ft. above canon, bears $N. W.$ and $S. E.$; descend.

64.00 Creek, 1 lk. wide, 1 in. deep, in hollow, 40 ft. below ridge, course $S. 25^{\circ} E.$; ascend.

Subdivision of T.14 S., R.15 E.-Continued.

Chains

65.00 Leave timber and enter dense undergrowth, bears N.W. and S.E.

80.00 Set a limestone, 24x11x4 ins., 18 ins. in the ground, for cor. of secs. 8, 9, 16, and 17, marked with 4 notches on S. and 4 notches on E. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.

Land, mountainous.

Soil, gravelly loam and sandy; 2nd and 3rd rate.

Timber, aspen.

Undergrowth, sage and deer brush.

Good grass for grazing.

Mountainous or heavily timber land, 80.00 chs.

N. 89° 58' E., on a random line bet. secs. 9 and 16.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

80.08 Intersect N. and S. line, 2 lks. S. of the cor. of secs. 9, 10, 15, and 16.

Thence I run

S. 89° 53' W., on a true line bet. secs. 9 and 16.

Over mountainous land, through scattering timber; ascend.

3.00 Top of ridge, 30 ft. above sec. cor., bears N.E. and S.W.; descend.

7.50 Creek, 2 lks. wide, 3 ins. deep, in bottom of Flat Canon, 200 ft. below ridge, course N. 60° E.; ascend.

10.00 Leave timber, bears N. 75° E. and S. 75° W.

23.00 Top of ridge, 80 ft. above canon, bears N. 60° W. and S. 60° E.; descend.

26.00 Bottom of hollow, 35 ft. below ridge, course S. 60° E.; ascend.

35.00 Top of ridge, 100 ft. above hollow, bears N. 20° W. and S. 20° E.; descend through dense undergrowth.

40.04 Set a limestone, 18x7x5 ins., 12 ins. in the ground, for

Subdivision of T.14 S., R.15 E. -Continued.

- Chains, $\frac{1}{2}$ sec.cor., marked $\frac{1}{2}$ on N.face; and raise a mound of stone, 2 ft.base, $1\frac{1}{2}$ ft.high, N.of cor.Pits impracticable.
- 48.00 Bottom of hollow, 150 ft.below ridge, course S.30°E.; ascend .
- 58.00 Enter heavy aspen timber, bears N.and S.
- 61.40 Spring on line, 2 lks., wide, 1 in.deep, course S.80°E., on mountainous side .
- 65.00 Leave timber, bears N.30°E.and S.30°W.
- 75.00 Top of ridge, 250 ft.above hollow, bears N.30°W.and S.30°E.; descend .
- 80.08 The cor.of secs.8,9,16, and 17.
Land, mountainous.
Soil, gravelly and rocky; 3rd and 4th rate.
Timber aspen.
Undergrowth, sage and deer brush.
Good grass for grazing.
Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.08 chs.
-
- N.0°03'W., bet.secs. 8 and 9.
Over mountainous land; through dense undergrowth; ascend .
- 20.00 Top of ascent, edge of mesa, 150 ft.above sec.cor., bears E.and W.; thence over mesa.
- 27.00 Enter heavy aspen timber, bears N.W.and S.E.:
- 35.00 Leave timber, bears N.E.and S.W.
- 40.00 Set a sandstone, 18x9x4 ins., 12 ins.in the ground, for $\frac{1}{2}$ sec.cor., marked $\frac{1}{2}$ on W.face; and raise a mound of stone, 2 ft.base, $1\frac{1}{2}$ ft.high W.of cor.Pits impracticable.
- 43.00 Leave mesa, bears N.E.and S.W.
Enter scattering aspen and pine timber, bears N.E. and S.W. Descend .
- 60.00 Bottom of hollow, 100 ft. below mesa, course N.10°E.; ascend .

Subdivision of T.14 S., R.15 E. -Continued.

Chains

60.10 A small spring bears S.W. about 10.00 chs. dist.; not seen from line.

80.00 Set a sandstone, 18x10x4 ins., 12 ins. in the ground, for cor. of secs. 4, 5, 8, and 9, marked with 5 notches on S. and 4 notches on E. edges; from which

An aspen, 5 ins. diam., bears N. 48° E., 60 lks. dist., marked T.14 S., R.15 E., S. 4, B.T.

A balsom, 15 ins. diam., bears S. 14° E., 70 lks. dist., marked T.14 S., R.15 E., S. 9, B.T.

A balsom 18 ins. diam., bears S. 19° W., 65 lks. dist., marked T.14 S., R.15 E., S. 8, B.T.

An aspen, 4 ins. diam., bears N. 49° W., 85 lks. dist., marked T.14 S., R.15 E., S. 5, B.T.

Land, mountainous.

Soil, gravelly loam and rocky; 2nd and 4th rate.

Timber, pine and aspen.

Undergrowth, sage and deer brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

July 27, 1902: At this cor. I set off 19° 19' N., on the decl. arc; and at 0 h 2 m p.m., l.m.t., observe the sun on the meridian, the resulting lat. is 39° 37' N.

N. 89° 53' E., on a random line bet. secs. 4 and 9.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.86 Intersect N. and S. line, 12 lks. S., of the cor. of secs. 3, 4, 9, and 10.

Thence I run

S. 89° 48' W., on a true line bet. secs. 4 and 9.

Over mountainous land; through dense undergrowth; ascend.

10.00 Enter scattering timber, bears N. and S.

17.00 Top of ascent, edge of mesa, 200 ft. above hollow, bears N. E. and S. W.; thence Over mesa. Leave timber.

Subdivision of T.14 S., R.15 E.-Continued.

Chains

39.93 Set a sandstone, 20x14x5 ins., 16 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

45.00 Leave mesa, bears N.E. and S.W.; descend .

51.00 Enter heavy timber, bears N. 50° E. and S. 50° W.

61.00 Leave timber, bears N. and S.

72.00 Enter timber, bears N. 35° E. and S. 35° W.

Bottom of hollow, 100 ft. below mesa, course N. 20° E.; ascend .

79.86 The cor. of secs. 4, 5, 8, and 9.

Land, mountainous.

Soil, black loam and gravelly; 1st and 3rd arate.

Timber, pine and aspen.

Undergrowth, sage and deer brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 79.86 chs.

N. 0° 03' W., bet. secs. 4 and 5, on random line,

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.90 Intersect N. bdy. of Tp., 21 lks. W., of the re-established cor. of secs. 4, 5, 32, and 33, heretofore described.

Thence I run

S. 0° 06' W., on a true line bet. secs. 4 and 5.

Over mountainous land; through dense undergrowth; descend .

6.50 Enter heavy timber, bears E. and W.

6.55 Creek, 2 lks. wide, 2 ins. deep, in Bottom of Jack canon, 40 ft. below sec. cor., course N. 80° E.; ascend.

32.00 Leave timber, bears N. 60° W. and S. 60° E.

35.00 Enter aspen, timber, bears E. and W.

39.90 Top of ridge, 400 ft. above canon, bears N.E. and S.W.

Set a sandstone, 18x13x4 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; from which

Subdivision of T.14 S., R.15 E. -Continued.

- Chains an aspen, 4 ins. diam., bears N.70° E., 20 lks.
dist., marked $\frac{1}{2}$ S.4, B.T.
An aspen, 4 ins. diam., bears N.40° W., 40 lks.
dist., marked $\frac{1}{2}$ S.5, B.T.
- Leave aspen timber bears E. and W. Descend .
- 63.25 Creek, 1 lk. wide, 1 in. deep, in bottom of hollow, 300 ft.
below ridge, course N.20° E.; ascend ;.
- 70.00 Top of spur, 50 ft. above hollow, bears N.80° W. and S.80°
E.; descend .
- 73.00 Creek, 5 lks. wide, 1 in. deep, in fork of Jack Canon, 50
ft. below spur, course N.20° E.; ascend .
- 76.00 Top of spur, 20 ft. above canon, bears N.E. and S.W.; des-
cend .
- 79.90 The cor. of secs. 4, 5, 8, and 9.
Land, mountainous.
Soil, black loam; 1st rate.
Timber, pine and aspen.
Undergrowth, sage and deer brush.
Good grass for grazing.
Mountainous or heavily timbered land, or land covered
with dense undergrowth, 79.90 chs.

July 27, 1902.

July 28, 1902: At 7 h. 3 m. a., m.l.m.t., I set off 39° 33'
N., on the lat. arc; 19° 09' N., on the decl. arc; and de-
termine a true meridian, with the solar, at the re-es-
tablished cor. of secs. 5, 6, 31, and 32, on S. bdy. of Tp.

Thence I run

N.0° 03' W., bet. secs. 31 and 32.

Over mountainous land, through heavy timber; ascend
along side of divide ridge between Rock and Range
Creek canons .

- 40.00 Set a sandstone, 24x14x4 ins., 18 ins. in the ground, for
 $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which
An aspen, 8 ins. diam., bears S.41° E., 120 lks.
dist., marked $\frac{1}{2}$ S.32, B.T.

Subdivision of T.14 S., R.15 E.-Continued.

Chains An aspen, 10 ins. diam., bears S. 59° W., 159 lks.
dist., marked $\frac{1}{4}$ S. 31, B.T.

46.00 Leave aspen timber, bears E. and W.

50.00 Divide ridge, between Range Creek and Rock Canons, 200
ft. above sec. cor., bears N. 50° W. and S. 5° E.; descend .

80.00 Set a sandstone, 18x12x5 ins., 12 ins. in the ground, for
cor. of secs. 29, 30, 31, and 32, marked with 1 notch
on S. and 5 notches on E. edges; and raise a mound of
stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impractic-
able.

Land, mountainous.

Soil, black loam; 1st rate.

Timber, pine and aspen.

Undergrowth, sage .

Good grass for grazing.

Mountainous or heavily timbered land, 80.00 chs.

East, on a random line bet. secs. 29 and 32.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.20 Intersect N. and S. line, 5 lks. N. of the cor. of secs.
28, 29, 32, and 33.

Thence I run

N. 89° 58' W., on a true line bet. secs. 29 and 32.

Over mountainous land; through scattering timber; as-
cend .

.50 Buck fence, bears N. W. and S. E.

5.00 Enter heavy timber, bears N. and S.

37.50 Leave heavy and enter scattering timber, bears N. and S.

40.10 Set a sandstone, 22x12x4 ins., 16 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from which

An aspen, 10 ins. diam., bears N. 58° E., 96 lks.
dist., marked $\frac{1}{4}$ S. 29, B.T.

An aspen, 8 ins. diam., bears S. 34° W., 166 lks.
dist., marked $\frac{1}{4}$ S. 32 B.T.

48.50 Top of ridge, 400 ft. above sec. cor., bears N. 20° E. and
S. 20° W.; descend .

Subdivision of T.14 S., R.15 E.-Continued.

Chains

- 51.50 Leave scattering timber, bears N. and S.
- 63.80 Creek, 1 lk. wide, 1 in. deep, in bottom of Rock canon, 200 ft. below ridge, course S. 20° E.; ascend .
- 64.80 Buck fence , bears N. and S.
- 65.30 Trail to Sunnyside, bears N. and S.
A spring of good water bears N. 25° E. about 3.00 chs. dist. A log cabin bears S. 8° 30' E., about 10.00 chs. dist., claimant unknown. A spring is West of house about 50 lks. dist. A corral is N. E. about 2.00 chs. dist. from house.
- 80.20 The cor. of secs. 29, 30, 31, and 32.
Land, mountainous.
Soil, black loam; 1st rate.
Timber, pine and aspen.
Undergrowth, sage .
Good grass for grazing.
Mountainous or heavily timbered land, 80.20 chs.
-
- West, on a random line bet. secs. 30 and 31.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 79.60 Intersect W. bdy. of Tp., 10 lks. S. of the cor. of secs. 25, 30, 31, and 36, heretofore described.
Thence I run
S. 89° 56' E., on a true line bet. secs. 30 and 31.
Over mountainous land; through scattering timber; descend .
- 4.00 Bottom of hollow, 100 ft. below sec. cor. course N. W.; ascend .
- 7.50 Leave scattering and enter heavy pine and aspen timber, bears N. and S.
- 14.50 Top of ridge, 200 ft. above hollow, bears N. 10° E. and S. 10° W.; descend .
- 25.25 Bottom of hollow, 200 ft. below ridge, course N. 50° W.; ascend .
- 39.60 Set a sandstone, 24x13x6 ins., 18 ins. in the ground, for

Subdivision of T.14 S., R.15 E.-Continued.

- Chains $\frac{1}{4}$ sec.cor., marked $\frac{1}{4}$ on N.face; from which
 - A balsom ,4 ins.diam., bears N.5°E., 10 lks. dist., marked $\frac{1}{4}$ S.30, B.T.
 - An aspen, 5 ins.diam., bears S.20°W., 12 lks. dist., marked $\frac{1}{2}$ S.31, B.T.
 - 43.50 Top of ridge, 200 ft. above hollow, bears N.W* and S.E.; descend .
 - 55.00 Bottom of hollow, 50 ft. below ridge, course N.W.; ascend.
 - 63.50 Top of divide ridge between Range Creek and Rock canon, bears N. and S.; descend .
 - 79.60 The cor. of secs. 29, 30, 31, and 32.
 - Land, mountainous.
 - Soil, black loam; 1st rate.
 - Timber, pine and aspen.
 - Undergrowth, sage and deer brush.
 - Good grass for grazing.
 - Mountainous or heavily timbered land, 79.60 chs.
 - July 28, 1902: At the noon hour the sky is overcast and solar observations are impossible .
-
- N.0° 3'W., bet. secs. 29 and 30 .
 - Over mountainous land; through dense undergrowth; descend .
 - 18.50 Head of Rock Canon, 100 ft. below sec.cor., course E.; ascend .
 - 32.00 Enter scattering aspen timber, bears E. and W.
 - 33.50 Top of divide ridge, between Range Creek and Rock canon, 250 ft. above canon, bears N.70°E. and S.20°W.; descend .
 - 37.50 Pole fence, bears N.83°E. and S.83°W.
 - 40.00 An aspen, 10 ins.diam., for $\frac{1}{2}$ sec.cor., bet secs. 29 and 30, I mark $\frac{1}{2}$ S.30, on W. side, 29 on E. side; from which
 - An aspen, 9 ins.diam., bears N.78°E., 80 lks. dist., marked $\frac{1}{4}$ S.29, B.T.
 - An aspen, 24 ins.diam., bears N.68°W., 86 lks.

Subdivision of T.14 S., R.15 E. -Continued.

- Chains dist., marked $\frac{1}{4}$ S.30, B.T.
- 52.90 Bottom of hollow, 100 ft. below ridge, course S.68°W.; ascend .
- 53.00 A spring bears S.80°W., about 18.00 chs. dist., not visible from line .
- 70.25 Trail to Sunnyside, bears N.W. and S.E.
- 78.50 Top of divide ridge between Flat Canon and Range Creek Canon, 150 ft. above hollow, bears N.80°W. and S.E.; descend .
- 80.00 Set a sandstone, 24x12x4 ins., 18 ins. in the ground, for cor. of secs. 19, 20, 29, and 30, marked with 2 notches on S. and 5 notches on E. edges; from which
- An aspen, 8 ins. diam., bears N.3°E., 133 lks. dist., marked T.14 S., R.15 E., S.20, B.T.
- An aspen, 10 ins. diam., bears S.56°E., 24 lks. dist., marked T.14 S., R.15 E., S.29, B.T.
- An aspen, 5 ins. diam., bears S.33°W., 47 lks. dist., marked T.14 S., R.15 E., S.30, B.T.
- An aspen, 7 ins. diam., bears N.48°W., 64 lks. dist., marked T.14 S., R.15 E., S.19, B.T.
- Land, mountainous.
- Soil, gravelly; 2nd rate.
- Timber, scattering aspen.
- Good grass for grazing.
- Mountainous land, 80.00 chs.

S.89°58'E., on a random line bet. secs. 20 and 29.

- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.00 Intersect N. and S. line, 5 lks. S. of the cor. of secs. 20, 21, 28, and 29.
- Thence I run
- West, on a true line bet. secs. 20 and 29.
- Over mountainous land; through scattering timber; ascend .
- 20.00 Head of hollow, course N.80°E.; ascend .
- 32.00 Top of ridge, 300 ft. above sec. cor., bears N.10°E. and

Subdivision of T.14 S., R.15 E. -Continued.

Chains S.10°W.;descend .

40.00 Set a sandstone,18x12x4 ins.,12 ins.in the ground,for
 $\frac{1}{2}$ sec.cor.,marked $\frac{1}{4}$ on N.face;from which

An aspen,14 ins.diam.,bears N.35°W.,165
 lks.dist.,marked $\frac{1}{4}$ S.20,B.T.

An aspen,12 ins.diam.,bears S.48°E.,67 lks.
 dist.,marked $\frac{1}{4}$ S.29,B.T..

45.00 Bottom of hollow,80 ft.below ridge,course N.3°E.;as-
 cend .

78.00 Top of ridge,200 ft.above hollow,bears N.10°E.and S.
 10°W.;descend .

80.00 The cor.of secs.19,20,29,and 30.

Land,mountainous.

Soil,black loam;1st rate.

Timber,scattering aspen and pine.

Good grass for grazing.

Mountainous land,80.00 chs.

N.89°56'W.,on a random line bet.secs.19 and 30.

40.00 Set temp. $\frac{1}{4}$ sec.cor.

79.54 Intersect W.bdy.of Tp.,23 lks.N.of the cor.of secs.
 19,24,25,and 30,heretofore described.

Thence I run

N.89°54'E.,on a true line bet.secs.19 and 30.

Over mountainous land;through scattering timber;as-
 cend.

20.00 Top of ridge,200 ft.above sec.cor.bears N.10 °E.and
 S.10°W.;descend .

30.00 Bottom of hollow,100 ft.below ridge,course S.10°W.;as-
 cend .

39.54 Set a sandstone,18x12x4 ins.,12 ins.in the ground,for
 $\frac{1}{2}$ sec.cor.,marked $\frac{1}{4}$ on N.face;from which

A pine,14 ins.diam.,bears N.30 lks.dist.,
 marked $\frac{1}{4}$ S.19,B.T.

A pine,24 ins.diam.,bears S.15 lks.dist.,

Subdivision of T.14 S., R.15 E. -Continued.

- Chains marked $\frac{1}{4}$ S.30, B.T.
- 42.00 Top of ridge, 150 ft. above hollow, bears N. and S.; descend .
- 52.00 Bottom of hollow, 100 ft. below ridge, course S.20° E.; ascend .
- 73.00 Top of divide ridge between Flat Canon and Range Creek Canon, 150 ft. above hollow, bears N.W. and S.80° E. Descend .
- 79.54 The cor. of secs. 19, 20, 29, and 30.
Land, mountainous.
Soil, black loam; 1st rate.
Timber, pine and aspen.
Good grass for grazing.
Mountainous land, 79.54 chs.

July 28, 1902.

July 29, 1902: At 7 h 2 m a.m., l.m.t., I set off 39° 35' N. on the lat. arc; 18° 55' N., on the decl. arc; and determine a true meridian, with the solar at the cor. of secs. 19, 20, 29, and 30.

Thence I run
N. 0° 03' W., bet. secs. 19 and 20.

Over mountainous land; through scattering timber; descend .

- 40.00 An aspen, 8 ins. diam., for $\frac{1}{4}$ sec. cor., bet. secs. 19 and 20., I mark $\frac{1}{4}$ S. 19 on W. face, and 20 on E. face; from which

An aspen, 8 ins. diam., bears S. 75° E., 60 lks. dist., marked $\frac{1}{4}$ S. 20, B.T.

An aspen, 8 ins. diam., bears N. 87° W., 85 lks. dist., marked $\frac{1}{4}$ S. 19, B.T.

- 42.00 Leave timber, bears E. and W.
- 60.00 Enter scattering timber, bears E. and W.
- 80.00 Set a sandstone, 22x14x6 ins., 16 ins. in the ground, for cor. of secs. 17, 18, 19, and 20, marked with 3 notches on S. and 5 notches on E. edges; and raise a mound of

Subdivision of T.14 S., R.15 E.-Continued.

Chains stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land mountainous.

Soil, black loam; 1st rate.

Timber, pine and aspen.

Good grass for grazing.

Mountainous land, 80.00 chs.

East, on a random line bet. secs. 17 and 20.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

80.08 Intersect N. and S. line, 12 lks. N., of the cor. of secs. 16, 17, 20, and 21.

Thence I run

N. $89^{\circ}55'W.$, on a true line bet. secs. 17 and 20.

Over mountainous land; through dense undergrowth; descend ..

1.60 Bottom of hollow, 20 ft. below sec. cor., course N.:

Enter scattering timber . Ascend .

30.00 Top of ridge, 100 ft. above hollow, bears N. and S. An old corral bears North about 4.00 chs. dist. Descend.

40.04 Set a sandstone, 15x12x8 ins., 10 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

A spring bears N., 50 lks. dist., in bottom of hollow, 50 ft. below ridge, course N. $20^{\circ}E.$; ascend .

42.00 Top of ridge, 20 ft. above hollow, bears N. and S.; descend .

80.08 The cor. of secs. 17, 18, 19, and 20.

Land, mountainous.

Soil, black loam; 1st rate.

Timber, pine and aspen.

Undergrowth, sage and deer brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth, 80.08 chs.

Subdivision of T.14 S., R.15 E. -Continued.

Chains

- S.89°54'W., on a random line bet. secs. 18 and 19.
- 40.00 Set temp. $\frac{1}{2}$ sec. cor.
- 79.50 Intersect W. bdy. of Tp., 14 lks. S. of the cor. of secs. 13, 18, 19, and 24, heretofore described.
- Thence I run
- East, on a true line bet. secs. 18 and 19.
- Over mountainous land; through scattering timber and dense undergrowth; ascend .
- 4.00 Top of divide ridge between Range Creek Canon and Flat Canon, 20 ft. above sec. cor., bears N.10°W. and S. E.; Descend .
- 23.00 Leave timber, bears N. and S.
- 26.00 Bottom of hollow, 100 ft. below ridge, course S.60°E.; ascend .
- 37.00 Top of ridge, 200 ft. above hollow, bears N. and S.; descend .
- 39.50 Set a sandstone, 20x14x4 ins., 15 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
- 60.50 Enter aspen timber, bears N. and S.
- 62.30 Bottom of hollow, 80 ft. below ridge, course N.75°E.; ascend .
- 62.40 A spring bears North about 12.00 chs. dist., not visible from line.
- 73.60 Top of ridge, 50 ft. above hollow, bears N.10°E. and S. 10°W.; descend .
- 74.00 Leave timber, bears N. and S.
- 74.10 Creek, 3 lks. wide, 2 ins. deep, in bottom of hollow, 20 ft. below ridge, course N.20°E.; ascend .
- 79.50 The cor. of secs. 17, 18, 19, and 20.
- Land, mountainous.
- Soil, black loam; 1st rate.
- timber, aspen.
- Undergrowth, sage and deer brush.
- Good grass for grazing.

Subdivision of T.14 S., R.15 E. -Continued.

Chains

Mountainous land, or land covered with dense undergrowth, 79.50 chs.

July 29, 1902: At the noon hour the sky is overcast and solar observations are impossible.

N. 0° 03' W., bet. secs. 17 and 18.

Over mountainous land; through dense undergrowth; descend .

4.50 Bottom of Flat Canon, 60 ft. below sec. cor., course N. 60° E.; ascend .

28.00 Enter heavy aspen timber, bears N. E. and S. W.

33.00 Top of ridge, 400 ft. above canon, bears N. 70° E. and S. 70° W.; descend .

40.00 Set a limestone, 18x10x4 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; from which

An aspen, 7 ins. diam., bears N. 80° E., 14 lks. dist., marked $\frac{1}{4}$ S. 17, B. T.

An aspen, 4 ins. diam., bears N. 75° W., 9 lks. dist., marked $\frac{1}{4}$ S. 18, B. T.

51.00 Bottom of hollow, 120 ft. below ridge, course E.; ascend.

68.00 Top of ridge, 150 ft. above hollow, bears N. E. and S. W.; descend .

80.00 Set a sandstone, 20x8x4 ins., 15 ins. in the ground, for cor. of secs. 7, 8, 17, and 18, marked with 4 notches on S. and 5 notches on E. edges; from which

An aspen, 8 ins. diam., bears N. 32° E., 43 lks. dist., marked T. 14 S., R. 15 E., S. 8, B. T.

An aspen, 8 ins. diam., bears S. 37° E., 68 lks. dist., marked T. 14 S., R. 15 E., S. 17, B. T.

An aspen, 10 ins. diam., bears S. 46° W., 52 lks. dist., marked T. 14 S., R. 15 E., S. 18, B. T.

An aspen, 13 ins. diam., bears N. 23° W., 32 lks. dist., marked T. 14 S., R. 15 E., S. 7, B. T.

Land, mountainous.

Soil, black loam; 1st rate.

subdivision of T.14 S., R.15 E.-Continued.

Chains Timber, aspen.

Undergrowth, sage and deer brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

S. 89° 55' E., on a random line bet. secs. 8 and 17.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.10 Intersect N. and S. line, 17 lks. N. of the cor. of secs. 8, 9, 18, and 17.

Thence I run

N. 89° 48' W., on a true line bet. secs. 8 and 17.

Over mountainous land; through scattering timber; descend .

10.25 Creek, 1 lk. wide, 1 in. deep, in bottom hollow, 100 ft. below sec. cor., course S. E.; ascend.

20.00 Leave timber, bears N. W. and S. E.

33.00 Top of ridge, 300 ft. above hollow, bears N. W. and S. E.; descend .

36.50 Enter dense aspen sapplings, bears N. and S.

40.05 Set a sandstone, 15x10x4 ins., 10 ins. in the ground, for $\frac{3}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from which

An aspen, 7 ins. diam., bears S., 30 lks. dist., marked $\frac{1}{4}$ S. 17, B. T.

An aspen, 7 ins. diam., bears N. 13° W., 126 lks. dist., marked $\frac{1}{4}$ S. 8, B. T.

43.50 Leave aspen sapplings, bears N. and S.

57.50 Bottom of hollow, 60 ft. below ridge, course S. E.; ascend.

61.50 Enter heavy aspen timber, bears N. 20° E. and S. 20° W.

68.00 Top of ridge, 75 ft. above hollow, bears N. 30° E. and S. 30° W.; descend .

75.00 Head of hollow, 30 ft. below ridge, course N. E.; ascend .

80.10 The cor. of secs. 7, 8, 17, and 18.

Land, mountainous .

Soil, black loam; 1st rate.

Timber, pine and aspen, mostly aspen.

Subdivision of T.14 S., R.15 E. -Continued.

Chains Undergrowth, aspen sapplings.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.10 chs.

West, on a random line bet. secs. 7 and 18.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

79.60 Intersect W. bdy. of Tp., at the cor. of secs. 7, 12, 13, and 18, heretofore described.

Thence I run

East, on a true line bet. secs. 7 and 18.

Over mountainous land; through heavy pine and aspen timber; descend .

10.00 Bottom of hollow, 50 ft. below sec. cor., course N. E.; ascend .

32.00 Trail on top of ridge, 50 ft. above hollow, bears N. and S.; descend .

39.60 Set a sandstone, 18x10x4 ins., 12 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; from which

An aspen, 10 ins. diam., bears N. 31° E., 22 lks. dist., marked $\frac{1}{2}$ S. 7, B. T.

An aspen, 9 ins. diam., bears S. 30° W., 33 lks. dist., marked $\frac{1}{2}$ S. 18, B. T.

65.00 Bottom of fork of Jack Canon, 100 ft. below ridge, course N. 20° E.; ascend .

72.00 Top of ridge, 200 ft. above canon, bears N. 20° E. and S. 20° W.; descend .

79.60 The cor. of secs. 7, 8, 17, and 18.

Land, mountainous.

Soil, black loam; 1st rate.

Timber, pine and aspen.

Undergrowth, a few scattering sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, 79.60 chs.

July 29, 1902.

Subdivision of T.14 S., R.15 E. -Continued.

Chains

July 30, 1902: At 7 h 2 m a.m., l.m.t. I set off $39^{\circ}30'N.$, on the lat. arc; $18^{\circ}41'N.$, on the decl. arc; and determine a true meridian, with the solar at the cor. of secs. 7, 8, 17, and 18.

Thence I run

$N.0^{\circ}03'W.$, bet. secs. 7 and 8.

Over mountainous land; through heavy timber; ascend.

14.50 Top of ridge, 200 ft. above sec. cor., bears $N.20^{\circ}E.$ and $S.20^{\circ}W.$; descend.

36.50 Leave timber, bears $N.60^{\circ}E.$ and $S.20^{\circ}W.$

36.60 Bottom of fork of Jack Canon, 150 ft. below ridge, course $N.60^{\circ}E.$; ascend.

39.50 Enter scattering aspen timber, bears $N.W.$ and $S.E.$

40.00 Set a sandstone, $20 \times 8 \times 4$ ins., 15 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which

An aspen, 4 ins. diam., bears $N.80^{\circ}E.$, 45 lks. dist., marked $\frac{1}{2}$ S. 8, B.T.

An aspen, 8 ins. diam., bears $N.56^{\circ}W.$, 23 lks. dist., marked $\frac{1}{2}$ S. 7, B.T.

50.00 Leave timber, bears $E.$ and $W.$

54.00 Top of ridge, 200 ft. above canon, bears $N.E.$ and $S.W.$; descend.

54.10 Enter pine and aspen timber; bears $N.E.$ and $S.W.$

75.25 Creek, 1 lk. wide, 2 ins. deep, in bottom of Jack Canon, 250 ft. below ridge, course $N.60^{\circ}E.$; ascend.

80.00 Set a sandstone, $14 \times 12 \times 6$ ins., 9 ins. in the ground, for cor. of secs. 5, 6, 7, and 8, marked with 5 notches on S. and 5 notches on E. edges; from which

An aspen, 5 ins. diam., bears $S.36^{\circ}E.$, 35 lks. dist., marked T.14 S., R.15 E., S. 8, B.T.

An aspen, 5 ins. diam., bears $S.9^{\circ}W.$, 108 lks. dist., marked T.14 S., R.15 E., S. 7, B.T.

No other trees within limits; raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, mountainous.

Soil, black loam; 1st rate.

Subdivision of T.14 S., R.15 E. -Continued.

Chains Timber, pine and aspen.

Good grass for grazing.

Mountainous or heavily timbered land, 80.00 chs.

S. 89° 48' E., on a random line bet. secs. 5 and 8.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.20 Intersect N. and S. line, 27 lks. S., of the cor. of secs. 4, 5, 8, and 9.

Thence I run

West, on a true line bet. secs. 5 and 8.

Over mountainous land; through dense undergrowth; ascend .

4.00 Top of ridge, 20 ft. above sec. cor., bears N. E. and S. W.

Descend .

10.30 Bottom of fork of Jack Canon 50 ft. below ridge, course N. 40° E.

Enter scattering timber, bears N. 40° E. and S. 40° W.

Ascend .

40.10 Set a sandstone, 18x10x8 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from which

A pine, 4 ins. diam., bears N. 25° W., 230 lks. dist., marked $\frac{1}{4}$ S. 5, B. T.

A pine, 8 ins. diam., bears S. 88° W., 190 lks. dist., marked $\frac{1}{4}$ S. 8, B. T.

42.50 Top of ridge, 200 ft. above hollow, bears N. 55° E. and S. 55° W.; descend .

43.00 Enter heavy pine timber, bears N. 55° E. and S. 55° W.

67.50 Bottom of canon, 200 ft. below ridge, course N. E. This is bottom of Jack Canon. Ascend .

77.00 Leave heavy and enter scattering timber, bears N. and S.

80.20 The cor. of secs. 5, 6, 7, and 8.

Land, mountainous.

Soil, black loam; 1st rate.

Timber, pine and aspen.

Good grass for grazing.

Undergrowth, sage and deer brush.

Subdivision of T.14 S., R.15 E. -Continued.

Chains Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.20 chs.

West, on a random line bet. secs. 6 and 7.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.50 Intersect W. bdy. of Tp., 12 lks. S. of the cor. of secs. 1, 6, 7, and 12, heretofore described.

Thence I run

S. $89^{\circ}55'$ E., on a true line bet. secs. 6 and 7.

Over mountainous land; through scattering undergrowth; ascend.

2.50 Top of ridge, 20 ft. above sec. cor., bears N.E. and S.W. Enter heavy aspen timber; descend.

25.75 Bottom of hollow, 100 ft. below ridge, course N.E.; ascend.

36.00 Leave heavy and enter scattering timber, bears N and S.

39.50 Set a sandstone, 24x14x4 ins., 18 ins. in the ground, cor. for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from which

An aspen, 8 ins. diam., bears N. 40° W., 120 lks. dist., marked $\frac{1}{4}$ S. 6, B.T.

No other trees within limits; dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor.

52.50 Top of ridge, 100 ft. above hollow, bears N.E. and S.W. Descend.

79.50 The cor. of secs. 5, 6, 7, and 8.

Land, mountainous.

Soil, black loam; 1st rate.

Timber, pine and aspen.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, 79.50 chs.

Subdivision of T.14 S., R.15 E.-Continued.

Chains N.0°03'W., on a random line bet. secs. 5 and 6.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.80 Intersect N. bdy. of Tp., 30 lks. W. of the cor. of secs. 5, 6, 31, and 32, heretofore described.

Thence I run

S.0°10'W., on a true line bet. secs. 5 and 6.

Over mountainous land; through scattering timber; descend .

10.00 Enter heavy pine timber, bears E. and W.

16.00 Leave timber, bears E. and W.

24.00 Enter aspen, timber, bears N.W. and S.E.

26.00 A small spring bears W., 75 lks. Dist., flows N.20°W.

36.00 Top of ridge, 200 ft. above sec. cor., bears N.60°E. and S.60°W.; descend .

36.25 Leave timber, bears N.60°E. and S.60°W.

39.80 Set a sandstone, 18x12x4 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

53.00 Bottom of hollow, 100 ft. below ridge, course N.60°E. Enter aspen timber, bears with hollow; ascend .

56.50 Leave timber, bears E. and W.

70.20 Top of ridge, 200 ft. above hollow, bears N.60°E. and S.60°W.; descend .

74.25 Enter havy aspen, timber, bears E. and W.

77.00 Leave timber, bears E. and W.

79.80 The cor. of secs. 5, 6, 7, and 8.

Land, mountainous.

Soil, black loam; 1st rate.

Timber, pine and aspen.

Good grass for grazing.

Mountainous or heavily timbered land, 79.80 chs.

July 30, 1902, 11.30 a.m.

Subdivision of T.14 S., R.15 E.-Concluded.

Chains This township is a rolling mountainous country, and the soil is mostly black loam; 1st rate..

The township is very well watered by Bear Creek, Rock Creek, Summer House Creek, Flat Canon Creek, and Jack Creek, and numerous springs all over the township.

Pine and aspen timber grow in abundance in all parts of the township..

There is some sage and deer brush in nearly all parts of the township, mostly scattering.

There is no mineral in the township..

There are no settlers in the township.

There is an abundant growth of rich and nutritious grasses growing in all parts of the township, and the township is very well adapted for grazing purposes.

There are about three thousand head of cattle now grazing on this township.

John R. Stewart
U.S. Deputy Surveyor.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by _____, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of _____ showing the respective capacities in which they acted:

- _____, Chainman.
_____, Chainman.
_____, Moundman.
_____, Moundman.
_____, Axman.
_____, Axman.
_____, Flagman.

Final affidavits see book O p. 115-116

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____, United States Deputy Surveyor, in surveying all those parts or portions of the _____ of the _____ meridian, _____ of _____, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for _____

- _____, Chainman.
_____, Chainman.
_____, Moundman.
_____, Moundman.
_____, Axman.
_____, Axman.
_____, Flagman.

Final affidavits see book O p. 115-116

Subscribed and sworn to before me this _____ day of _____, 189 _____



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from _____ United States Surveyor General for _____, bearing date of the _____ day of _____, 189 _____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____ of the _____ meridian, in the _____ of _____, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

United States Deputy Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 189 _____ }



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salih Lakebitz, Utah Jan 18 1909, 189 _____

The foregoing field notes of the survey of *the subdivision lines of Township 14 South Range 15 East of the Salt Lake Base and Meridian Utah*

executed by *John Stewart* under his contract No. *257*, dated *January 2, 1909*, 189 _____, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Edward H. Anderson
United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General.

Filed Nov. 3, 1901, E. S. G.

4-679.

G.

BOOK A-294

12-11-03
103

FIELD NOTES

Retracement
OF THE ~~XXXXXX~~ OF THE

SOUTH

BOUNDARY

of

Township No. 13 South, Range No. 14 East.

and the Resurvey of the

WEST BOUNDARY

of

Township No. 13 South, Range No. 14 East.

Of the Salt Lake Base and Meridian,

in the STATE OF UTAH

AS SURVEYED BY

John R. Stewart, United States Deputy Surveyor,

Under his Contract No. 250, dated January 2, 1902, ~~1892~~

Survey commenced July 30, 1902, ~~1892~~

Survey completed August 1, 1902, ~~1892~~

S. Body returned base	1 00 70"	
S " " Contingent		4.79.99"
W. Body resurvey by K	5.39.98"	
Closing	27 10'	

NAMES AND DUTIES OF ASSISTANTS.

Hyrum G. Smith Chairman

John G. Smith Chairman

Jacob A. Acord Moundman

Edwin A. Peay Moundman

Joseph A. Passey Axman

Andy J. Stewart Axman

Otto R. Stewart Flagman

For preliminary affidavits see book "C" 4195 of 1910

BOOK A-294

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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, _____ and _____
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of _____

_____, *Chainman.*
_____, *Chainman.*

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of _____

_____, *Moundman.*
_____, *Moundman.*

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of _____

_____, *Axman.*
_____, *Axman.*

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



I, _____, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of _____

_____, *Flagman.*

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



-1-

Retracement of South Boundary of T.13 S., R.14 E.

Survey commenced July 30, 1902, and executed with a W. and L. E. Gurley light mountain transit, No. 1, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other reading to single minutes of arc; which is also the least count of the latitude and declination arcs.

The instrument was examined, tested on the true meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, on June 14, 1902.

I examine the adjustments of the instrument and correct the level and collimation errors, then, to test the solar apparatus by comparing its indications resulting from solar observations made during p.m. and a.m. hours, with a true meridian, established by Polaris observation, I proceed as follows:

At the cor. of Tps. 13 and 14 S., Rs. 14 and 15 E., heretofore described, latitude $39^{\circ}38'N.$, longitude $110^{\circ}19'31''$ west, I set off $39^{\circ}38'N.$, on the lat. arc; $18^{\circ}35'N.$, on the decl. arc; and at 4 h 2 m p.m., l.m.t., determine a true meridian, with the solar, and mark a point thereof on a stone, firmly set in the ground, 5.00 chs. N. of the cor.

At 10 h 56 m p.m., l.m.t., I observe Polaris at eastern elongation in accordance with the Manual, and mark a point in the line thus determined, by a tack driven in a wooden plug set in the ground, 5.00 chs. N. of the cor.

July, 30, 1902.

July 31, 1902, At 6 h 30 m a.m., l.m.t., I lay off the azimuth of Polaris $1^{\circ}35'$ to the west, and mark a point in the meridian thus determined by cutting a small groove in the stone already set 5.00 chs. N. of

Retracement of South Boundary of T. 13 S., R. 14 E. -Continued.

Chains of the cor.; on which the true meridian falls 0.38 ins. east of the true meridian, established by the solar.

At 7 h 2 m a.m., l.m.t., I set off $39^{\circ}38'N.$, on the lat. arc; $18^{\circ}27'N.$, on the decl. arc; and mark a point in the true meridian, determined with solar, by a cross on the stone, already set 5.00 chs. N. of the cor.; this mark falls 0.32 ins. east of the true meridian established by observation on Polaris.

The solar apparatus by p.m., and a.m. observations, defines positions for true meridians respectively about $0'20''$ west and $0'17''$ east of the true meridian established by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian, at 7 h 58 m a.m., l.m.t., is $16^{\circ}10'W.$, the angle thus determined reduced by the table page 100 of the Manual, gives the mean mag. decl. $16^{\circ}04'E.$

Note: Before commencing the survey of the east and north boundaries of this township I proceed to retrace the south and west boundaries to locate any errors that may be in them, in order to properly close my own work; therefore

I run

$N. 89^{\circ}48'W.$, on a retracement line along south boundary of T. 13 S., R. 14 E., bet. secs. 1 and 36.

39.94 The $\frac{1}{2}$ sec. cor. bet. secs. 1 and 36, which is a sandstone, $5 \times 12 \times 4$ ins. above ground, firmly set, and marked and witnessed as described by the surveyor general, bears South 5 lks. dist.

79.88 The cor. of secs. 1, 2, 35, and 36, which is a sandstone, $16 \times 9 \times 5$ ins., above ground, firmly set, and marked and witnessed as described by the surveyor general, bears South 10 lks. dist., The course of this line is there-

Retracement of South Boundary of T.13 S., R.14 E.-Continued.

Chains fore N.89° 52' W.

N.89° 48' W., on a retracement line bet. secs. 2 and 35.

39.92 The $\frac{1}{2}$ sec. cor. bet. secs. 2 and 35, which is a sandstone, 6x7x5 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general, bears South 2 lks. dist.

79.72 The cor. of secs. 2, 3, 34, and 35, which is a sandstone, 6x9x5 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general, bears South 5 lks. dist.,

The course of this line is therefore N.89° 50' W.

N.89° 48' W., on a retracement line bet. secs. 3 and 34.

40.03 The $\frac{1}{2}$ sec. cor. bet. secs. 3 and 34, which is a sandstone, 5x12x4 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general, bears South 2 lks. dist.

80.06 The cor. of secs. 3, 4, 33, and 34, which is a sandstone, 6x10x4 ins., above ground, firmly set and marked and witnessed as described by the surveyor general, bears South 5 lks. dist.

The course of this line is therefore N.89° 50' W.

N.89° 48' W., on a retracement line bet. secs. 4 and 33.

40.06 The $\frac{1}{2}$ sec. cor., bet. secs. 4 and 33, which is a sandstone, 6x7x3 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general, bears South 7 lks. dist.

80.13 The cor. of secs. 4, 5, 32, and 33, which is a sandstone, 6x14x7 ins., above ground, firmly set, and marked and

Retracement of South Boundary of T.13 S., R.14 E. -Concluded.

Chains witnessed as described by the surveyor general, bears South 14 lks. dist.

The course of this line is therefore N. 89° 54' W.

N. 89° 48' W., on a retracement line bet. secs. 5 and 32.

40.10 The $\frac{1}{2}$ sec. cor., bet. secs 5 and 32, which is a sandstone, 6x14x5 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general, bears South. 1 lk. dist.

80.20 The cor. of secs. 5, 6, 31, and 32, which is a sandstone, 8x12x5 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general, bears South 2 lks. dist.

The course of this line is therefore N. 89° 49' W.

N. 89° 48' W., on a retracement line bet. secs. 6 and 31.

40;00 The $\frac{1}{4}$ sec. cor. bet. secs. 6 and 31, which is a sandstone, 7x9x6 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general, bears South 1 lk. dist.

80.70 The cor. of Tps. 13 and 14 S., Rs. 13 and 14 E., which is a sandstone, 8x10x6 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general, bears South 2 lks. dist.

The course of this line is therefore N. 89° 49' W.

July 31, 1902; At the noon hour the sky is overcast and solar observations are impossible.

From the cor. of Tps. 13 and 14 S., Rs. 13 and 14 E., described above,

Retracement of West Boundary of T.13 S., R.14 E.-Continued.

Chains Thence I run

North, on a retracement line bet. secs. 31 and 36.

40.00 Find no trace of $\frac{1}{4}$ sec. cor. after diligent search,
set temp. $\frac{1}{2}$ sec. cor.

80.00 Find no trace of old sec. cor. Search diligently.
Set temp. cor. of secs. 25, 30, 31, and 36.

North, on a retracement line bet. secs. 25 and 30,
from temp. sec. cor.

40.00 Search diligently but fail to find the $\frac{1}{2}$ sec. cor. bet.
secs. 25 and 30. Set temp. $\frac{1}{2}$ sec. cor.

80.00 Search diligently but fail to find the cor. of secs. 25,
30, 19, and 24. Set temp. cor.

North, on a retracement line bet. secs. 19 and 24.
from temp. cor.

40.00 Find no trace of $\frac{1}{2}$ sec. cor., bet. secs. 19 and 24,
set temp. $\frac{1}{2}$ sec. cor. after diligent search.

80.00 Search diligently for cor. of secs. 13, 18, 19, and 24,
but fail to find any cor.; therefore I set temp.
cor. of secs. 13, 18, 19, and 24.

North, on a retracement line bet. secs. 13 and 18.

40.00 The $\frac{1}{2}$ sec. cor., bet. secs. 13 and 18, which is a sand-
stone, 5x9x6 ins., above ground, firmly set, and marked
and witnessed as described by the surveyor general,
bears S. 55° W. 274 lks. dist.

80.00 The cor. of secs. 7, 12, 13, and 18, which is a sandstone,
6x7x7 ins., above ground, firmly set, and marked and
witnessed as described by the surveyor general,
bears S. 56° W. 315 lks. dist.

Note: From these connections just made and the fact
that so many corners on this boundary are missing I

Resurvey of the West Boundary of T.13 S., R.14 E.

Chains deem it necessary to resurvey the boundary, in accordance with "Special Instructions".

July 31, 1902.

August 1, 1902: At 7 h 2 m a.m., l.m.t., I set off $39^{\circ} 38'$ N., on the lat. arc; $18^{\circ} 12'$ N., on the decl. arc; and determine a true meridian, with the solar, at the cor. of Tps. 13 and 14 S., R. 13 and 14 E., heretofore described.

Thence I run

North, on a true line bet. secs. 31 and 36.

Over mountainous land; through scattering aspen timber; descend.

4.00 Bottom of hollow, 50 ft. below Tp. cor., course W.; ascend.

8.50 Leave timber, bears E. and W.

15.00 Top of ridge, 100 ft. above hollow, bears N.E. and S.W.
Descend.

16.00 Enter heavy timber, bears N.E. and S.W.

24.50 Bottom of hollow, 100 ft. below ridge, course S.W.

Leave timber, bears S.W. and N.E.

Ascend.

31.50 Enter heavy aspen timber, bears E. and W.

37.00 Leave timber, bears E. and W.

40.00 Search dilligently all ground within a radius of 5.00

chs. from this point but fail to find old $\frac{1}{4}$ sec. cor.

Set a sandstone, $18 \times 11 \times 4$ ins., 12 ins. in the ground,

for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; and raise a

mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits

impracticable.

48.00 Top of divide ridge, 150 ft. above hollow, bears N.W.
and S.E.

Resurvey of West Boundary of T.13 S., R.14 E.-Continued.

Chains Descend .

47.00 Enter dense aspen sapplings (which have been killed by fire) bears E. and W.

58.00 Bottom of hollow, 50 ft. below ridge, course N. 60° E. :
Ascend .

60.00 Top of ridge, 50 ft. above hollow, bears E. and W. :
Descend .

69.50 Bottom of hollow, 120 ft. below ridge, course N. 75° E. :
Ascend .

71.50 Top of spur, 50 ft. above hollow, bears E. and W. :
Descend .

72.00 Enter scattering timber, bears E. and W.

80.00 Search diligently all ground within a radius of 10.00 chs. of this point but fail to find any trace of old cor.

Set a sandstone, 16x10x4 ins., 11 ins. in the ground, for cor. of secs. 25, 30, 31, and 36, marked with 5 notches on N. and 1 notch on S. edges; from which

An aspen, 4 ins. diam., bears N. 30° E., 60 lks. dist., marked T.13 S., R.14 E., S.30, B.T.

An aspen, 4 ins. diam., bears S. 71° E., 35 lks. dist., marked T.13 S., R.14 E., S.31, B.T.

An aspen, 4 ins. diam., bears S. 58 ° W., 150 lks. dist., marked T.13 S., R.13 E., S.36, B.T.

An aspen, 4 ins. diam., bears N. 33° W., 120 lks. dist., marked T.13 S., R.13 E., S.25, B.T.

Land, mountainous.

Soil, black loam and gravelly; 1st and 3rd rate.

Timber, aspen.

Good grass for grazing.

Mountainous or heavily timbered land, 80.00 chs.

North, on a resurvey line bet. secs. 25 and 30.

Over mountainous land; through scattering timber; descend.

Resurvey of West Boundary of T.13 S., R.14 E. -Continued.

Chains

37.90 Creek, 1 lk. wide, 3 ins. deep, in bottom of branch of
Whitmore Canon, 350 ft. below sec. cor., course N.75°E.

Ascend .

40.00 Search diligently but fail to find old $\frac{1}{4}$ sec. cor.

Set a sandstone, 18x12x8 ins., 12 ins. in the ground,
for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; from which

An aspen, 10 ins. diam., bears S.55°E., 109 lks.
dist., marked $\frac{1}{4}$ S.30, B.T.

An aspen, 6 ins. diam., bears N.82°W., 80 lks.
dist., marked $\frac{1}{4}$ S.25, B.T.

42.00 Top of ridge, 100 ft. above canon, bears E. and W.

Descend .

51.00 Creek, 2 lks. wide, 3 ins. deep, in bottom of branch of
Whitmore Canon, 200 ft. below ridge, course S.25°E. Ascend.

65.00 Ridge, 100 ft. above canon, bears E. and W.; descend .

80.00 Find no trace of old cor. after diligent search.

Set a limestone, 16x9x5 ins., 11 ins. in the ground, for
cor. of secs. 19, 24, 25, and 30, marked with 4 notches
on N. and 2 notches on S. edges; from which

An aspen, 5 ins. diam., bears N.45°E., 55 lks.
dist., marked T.13 S., R.14 E., S.19, B.T.

A pine, 5 ins. diam., bears S.70°E., 35 lks.
dist., marked T.13 S., R.14 E., S.30, B.T.

An aspen, 7 ins. diam., bears S.40°W., 70 lks.
dist., marked T.13 S., R.13 E., S.25, B.T.

A pine, 4 ins. diam., bears N.30°W., 75 lks.
dist., marked T.13 S., R.13 E., S.24, B.T.

Land, mountainous.

Soil, gravelly and rocky; 2nd and 4th rate.

Timber, pine and aspen.

Good grass for grazing.

Mountainous land, 80.00 chs.

North, on a resurvey line bet. secs. 19 and 24.

Resurvey of West Boundary of T.13 S., R.14 E. -Continued.

Chains

Over mountainous land; through scattering timber;

descend .

1.00 Bottom of hollow, 20 ft. below sec. cor., course S. 70° W.

Ascend .

10.00 Top of spur, 75 ft. above hollow, bears N. 70° E. and S. 70° W.

Descend .

14.25 Creek, 1 lk. wide, 1 m. deep, in bottom of hollow, 100 ft. below ridge, course S. 60° W.

Ascend .

28.00 Top of spur, 250 ft. above hollow, bears N. E. and S. W.

Leave timber and enter dense aspen sapplings, bears N. E. and S. W.

Descend .

35.50 Bottom of hollow, 75 ft. below spur, course S. 65° W.;

Ascend .

40.00 Search diligently but fail to find old $\frac{1}{4}$ sec. cor.

Set a sandstone, 24x8x6 ins., 18 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; from which

An aspen, 4 ins. diam., bears N. 85° E., 15 lks. dist., marked $\frac{1}{4}$ S. 19, B. T.

An aspen, 4 ins. diam., bears S. 30° W., 35 lks. dist., marked $\frac{1}{4}$ S. 24, B. T.

65.25 Top of long ridge, 300 ft. above hollow, bears N. 60° W. and S. 60° E.:

Leave aspen sapplings and enter heavy pine and aspen timber, bears N. 60° W. and S. 60° E.

Descend .

76.00 Bottom of hollow, 75 ft. below ridge, course N. E.

Ascend .

80.00 Find no trace of old sec. cor. after diligent search.

Set a sandstone, 14x10x9 ins., 9 ins. in the ground, for cor. of secs. 13, 18, 19, and 24, marked with 3 notches on N. and 3 notches on S. edges; from which

Resurvey of the West boundary of T.13 S., R.14 E.-Continued.

Chains An aspen, 5 ins. diam., bears N.45° E., 65 lks.
 dist., marked T.13 S., R.14 E., S.18, B.T.
 A pine 4 ins. diam., bears S.70° E., 36 lks.
 dist., marked T.13 S., R.14 E., S.19, B.T.
 A pine, 8 ins. diam., bears S.36° W., 165 lks.
 dist., marked T.13 S., R.13 E., S.24, B.T.
 An aspen, 5 ins. diam., bears N.27° W., 66 lks.
 dist., marked T.13 S., R.13 E., S.13, B.T.

Land, mountainous.

Soil, gravelly; 3rd rate.

Timber, pine and aspen.

Undergrowth, aspen sapplings.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered
 with dense undergrowth, 80.00 chs.

August 1, 1902: at this cor. I set off 18° 08' N., on the
 decl. arc; and at 0 h 3 m p.m., l.m.t., observe the sun
 on the meridian, the resulting lat. is 39° 41' N.

North, on a resurvey line bet. secs. 13 and 18.

Over mountainous land; through heavy timber;

Ascend .

5.00 Top of ridge, 25 ft. above sec. cor., bears N.30° E. and
 S.30° W.

Descend .

27.00 Bottom of hollow, 125 ft. below ridge, course N.30° E.

Ascend .

29.50 Top of spur, 20 ft. above hollow, bears N.E. and S.W.

Descend .

32.75 Creek, 2 lks. wide, 2 ins. deep, in bottom of Whitmore
 Canon, 50 ft. below spur, course N.75° E.

Ascend .

40.00 Set a sandstone, 18x10x4 ins., 12 ins. in the ground,
 for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which

Resurvey of West Boundary of T.13 S., R.14 E. -Continued.

Chains

An aspen, 4 ins. diam., bears N. 55° E., 20 lks.
dist., marked $\frac{1}{2}$ S. 18, B. T.

An aspen, 4 ins. diam., bears N. 50° W., 35 lks.
dist., marked $\frac{1}{4}$ S. 13, B. T.

The old $\frac{1}{2}$ sec. cor. bears S. 55° W. 274 lks. dist. I destroy all traces of the old cor.

48.00 Top of divide ridge between Whitmore and Sheep Canons,
200 ft. above canon, bears N. 75° E. and S. 75° W.:

Descend .

80.00 Set a sandstone, 16x8x4 ins., 11 ins. in the ground, for
cor. of secs. 7, 12, 13, and 18, marked with 2 notches on
N. and 4 notches on S. edges; from which

A pine, 8 ins. diam., bears N. 54° E., 52 lks.
dist., marked T. 13 S., R. 14 E., S. 7, B. T.

A pine, 10 ins. diam., bears S. 31° E., 24 lks.
dist., marked T. 13 S., R. 14 E., S. 18, B. T.

A pine, 7 ins. diam., bears S. 29° W., 39 lks.
dist., marked T. 13 S., R. 13 E., S. 13, B. T.

A pine, 10 ins. diam., bears N. 35° W., 52 lks.
dist., marked T. 13 S., R. 13 E., S. 12, B. T.

Note: The old cor. of secs. 7, 12, 13, and 18, bears S. 56° W.
315 lks. dist. I destroy all traces of the old cor.

Land, mountainous .

Soil, gravelly; 3rd rate.

Timber, pine and aspen.

Good grass for grazing.

Mountainous or heavily timbered land, 80.00 chs.

North, on a resurvey line bet. secs. 7 and 12.

Over mountainous land; through heavy timber;

Descend .

13.00 Bottom of head of Sheep Canon, 100 ft. below sec. cor.,
course N. W. Creek 1 in. deep, 1 lk. wide, in bottom.

Ascend .

Resurvey of West Boundary of T.13 S., R.14 E.-Continued.

Chains

17.50 Spur, 50 ft. above canon, bears N.30°W. and S.30°E.

Descend .

22.75 Bottom of same Sheep Canon, 60 ft. below spur, course N.30°E. (No water in bottom at this point)

Ascend .

30.00 Top of ridge, 30 ft. above canon, bears N.E. and S.W.

Descend .

40.00 Set a sandstone, 16x10x4 ins., 11 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; from which

An aspen, 4 ins. diam., bears S.75°E., 85 lks. dist., marked $\frac{1}{4}$ S.7, B.T.

An aspen, 4 ins. diam., bears S.64°W., 60 lks. dist., marked $\frac{1}{4}$ S.12, B.T.

Note. The old $\frac{1}{4}$ sec. cor. bet. secs. 7 and 12, which is a sandstone, 4x9x9 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general, bears S.66°W., 362 lks. dist. I destroy all traces of the old cor.

71.00 Bottom of hollow, 100 ft. below ridge, course N.60°E.

Ascend .

73.00 Leave timber, bears E. and W.

80.00 Set a sandstone, 18x9x5 ins., 12 ins. in the ground, for cor. of secs. 1, 6, 7, and 12, marked with 1 notch on N. and 5 notches on S. edges; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Note: The old cor. of secs. 1, 6, 7, and 12, which is a limestone, 5x9x8 ins., above ground, firmly set and marked and witnessed as described by the surveyor general, bears S.77°W., 424 lks. dist. I destroy all traces of the old cor.

Land, mountainous.

Soil, loam and gravelly; 1st and 3rd rate.

Timber, pine and aspen .

Good grass for grazing.

Resurvey of the West Boundary of T.13 S., R.14 E.-Continued.

Chains Mountainous or heavily timbered land, 80.00 chs.

North, on a resurvey line bet. secs. 1 and 6.

Over mountainous land; through undergrowth;

Ascend .

2.00 Top of ridge, 25 ft. above sec. cor., bears N. 70° E. and
S. 70° W.

Descend .

3.10 Enter scattering timber, E. and W.

30.00 Leave timber, bears N. 60° E. and S. 60° W.

39.98 To point 27.10 chs. East of the cor. of Tps. 12 South
., Rs. 13 and 14 E., which is a sandstone, 6x10x6 ins.
above ground, firmly set, and marked and witnessed as
described by the surveyor general.

Set a sandstone, 20x12x5 ins., 15 ins. in the ground,
for closing cor. of Tps. 13 S., Rs. 13 and 14 E., marked
C.C. 13 S. on S., 14 E. on E., and 13 E. on W. faces; with
6 grooves on S., E., and W. faces; and raise a mound of
stone, 2 ft. base, 1½ ft. high, S. of cor. Pits impractic-
able.

Note: I search diligently all ground within a radius of
10.00 chs. from this cor. and also from the point where
the old notes call for the cor., but I fail to find
any trace of the old closing cor. of Tps. 13 S., Rs. 13
and 14 E.

Land, mountainous.

Soil, gravelly loam; 2nd rate.

Timber, pine and aspen.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous land, 39.98 chs.

August 1, 1902.

Note: For general description see N. bdy. Tp. 13 S., R. 14 E.

John R. Stewart

U. S. Deputy Surveyor.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by _____

_____, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of _____

showing the respective capacities in which they acted:

_____, Chainman.

_____, Chainman.

_____, Moundman.

_____, Moundman.

_____, Axman.

_____, Axman.

_____, Flagman.

In final affidavits see book K

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____

_____, United States Deputy Surveyor, in surveying all those parts or portions of the _____

_____ of the _____

_____ meridian, _____ of _____, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor

General for _____

_____, Chainman.

_____, Chainman.

_____, Moundman.

_____, Moundman.

_____, Axman.

_____, Axman.

_____, Flagman.

In final affidavits see book K

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from _____ United States Surveyor General for _____, bearing date of the _____ day of _____, 189 _____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____ of the _____ meridian, in the _____ of _____, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

John R. Stewart

United States Deputy Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 189 _____ }



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

John R. Stewart, *Delaware*, 189 _____

The foregoing field notes of the survey of ^{rehearsment see} *South and West Boundaries of Township 13 South Range 14 East of the Salt Lake Base and Meridian Utah*

executed by *John R. Stewart* under his contract No. *250*, dated *January 2 1902*, 189 _____, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the ^{rehearsment see} surveys they describe, are hereby approved.

Edward R. Anderson
United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General.

Vertical text or markings along the right edge of the page, possibly bleed-through or a margin note.

Filed Nov. 3, 1902.

4-679.

H.

BOOK A-294

FIELD NOTES

OF THE SURVEY OF THE

EAST AND NORTH BOUNDARIES

of

Township No. 13 South, Range No. 14 East

Of the Salt Lake Base and Meridian,

in the STATE OF UTAH

AS SURVEYED BY

John R. Stewart, United States Deputy Surveyor,

Under his Contract No. 250, dated January 2, 1902, 189x

Survey commenced August 2, 1902. 189x

Survey completed August 4, 1902. 189x

6-151

E. Bdy. length	5.3990 ^v
W " " "	6.0044 ^v

*E. Bdy.
J. L. P.*

*72.5-03
2.25
J. H. 125*

NAMES AND DUTIES OF ASSISTANTS.

Hyrum G. Smith Chairman

John G. Smith Chairman

Jacob A. Acord Moundman

Edwin A. Peay Moundman

Joseph A. Passey Axman

Andy J. Stewart Axman

Otto R. Stewart Flagman

BOOK A-294

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Meanders Page _____

PRELIMINARY OATHS OF ASSISTANTS.

WE, Hyrum G. Smith and John G. Smith
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of the East and North boundaries of T. 13 S., R. 14 E.; the East and fractional North boundaries of T. 12 S., R. 14 E.; and the West, South, and East boundaries of T. 11 S., R. 15 E. of the Salt Lake Base and Meridian, Utah.

Hyrum G. Smith, Chainman.

John G. Smith, Chainman.

Subscribed and sworn to before me this 16th
day of June 1902,



John R. Stewart
U. S. Deputy Surveyor

WE, Jacob A. Acord and Edwin A. Peay
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of the East and North boundaries of T. 13 S., R. 14 E.; the East and fractional North boundaries of T. 12 S., R. 14 E.; and the West, South, and East boundaries of T. 11 S., R. 15 E. of the Salt Lake Base and Meridian, Utah.

Jacob A. Acord, Moundman.

Edwin A. Peay, Moundman.

Subscribed and sworn to before me this 16th
day of June 1902,



John R. Stewart
U. S. Deputy Surveyor

WE, Joseph A. Passey and Andy J. Stewart
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of the East and North boundaries of T. 13 S., R. 14 E.; the East and fractional North boundaries of T. 12 S., R. 14 E.; and the West, South, and East boundaries of T. 11 S., R. 15 E. of the Salt Lake Base and Meridian, Utah.

Joseph A. Passey, Axman.

Andy J. Stewart, Axman.

Subscribed and sworn to before me this 16th
day of June 1902,



John R. Stewart
U. S. Deputy Surveyor

I, Otto R. Stewart, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of the East and North boundaries of T. 13 S., R. 14 E.; the East and fractional North boundaries of T. 12 S., R. 14 E.; and the West, South, and East boundaries of T. 11 S., R. 15 E. of the Salt Lake base and Meridian, Utah.

Otto R. Stewart, Flagman.

Subscribed and sworn to before me this 16th
day of June 1902,



John R. Stewart
U. S. Deputy Surveyor

East Boundary of T.13 S., R.14 E. -

Chains

Survey commenced August 2, 1902, and executed with a W. and L. E. Gurley light mountain transit, No. 1, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the latitude and declination arcs.

At the cor. of Tps. 13 and 14 S., Rs. 14 and 15 E., heretofore described, latitude $39^{\circ} 38' N.$, longitude $110^{\circ} 19' 31'' W.$, I set off $39^{\circ} 38' N.$, on the lat. arc; $17^{\circ} 54' N.$, on the decl. arc; and at 10 h 2 m a.m., l.m. t., determine a true meridian with the solar.

Note: For complete test of instrument see notes of retracement of South Boundary of T. 13 S., R. 14 E., which was made at this cor.

Thence I run

North, bet. secs. 31 and 36.

Over mountainous land; through scattering timber.

Ascend .

10.00 Top of ridge, 40 ft. above Tp. cor., bears N. $30^{\circ} E.$ and S. $30^{\circ} W.$

Descend .

10.25 Enter heavy timber, bears N. $30^{\circ} E.$ and S. $30^{\circ} W.$

, 17.50 Bottom of hollow, 50 ft. below ridge, course N. $20^{\circ} E.$;

Ascend .

36.00 Top of ridge, 60 ft. above hollow, bears N. $60^{\circ} E.$ and S. $60^{\circ} W.$

Descend .

40.00 Set a sandstone, 18x8x4 ins., 12 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which

A pine, 5 ins. diam., bears N. $50^{\circ} E.$, 55 lks. dist., marked $\frac{1}{2}$ S. 31, B. T.

A pine, 5 ins. diam., bears S. $70^{\circ} W.$, 50 lks. dist., marked $\frac{1}{2}$ S. 36, B. T.

51.50 Bottom of Cottonwood Canon, 200 ft. below ridge, course N. E.:

East Boundary of T.13 S., R.14 E.-Continued.

Chains

Ascend .

- 59.50 Leave timber, bears N.E. and S.W.
 66.00 Enter timber, bears N.E. and S.W.
 72.50 Top of ridge, 100 ft. above canon, bears N. 60° E. and
 S. 60° W.

Descend .

- 80.00 Set a sandstone, 18x8x4 ins., 12 ins. in the ground,
 for cor. of secs. 25, 30, 31, and 36, marked with 5
 notches on N. and 1 notch on S. edges; from which
- An aspen, 7 ins. diam., bears N. 75° E., 115 lks.
 dist., marked T.13 S., R.15 E., S.30, B.T.
 - An aspen, 5 ins. diam., bears S. 9° E., 28 lks.
 dist., marked T.13 S., R.15 E., S.31, B.T.
 - An aspen, 6 ins. diam., bears S. 73° W., 85 lks.
 dist., marked T.13 S., R.14 E., S.36, B.T.
 - An aspen, 9 ins. diam., bears N. 50° W., 130 lks.
 dist., marked T.13 S., R.14 E., S.25, B.T.

Land, mountainous.

Soil, black loam and gravelly; 1st and 3rd rate.

Timber, pine and aspen.

Undergrowth, a few scattering sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, 80.00 chs.

North, bet. secs. 25 and 30.

Over mountainous land, through heavy timber.

Descend.

- 4.65 Bottom of hollow, 40 ft. below sec. cor., course E.

Ascend.

- 7.00 Top of ridge, 60 ft. above hollow, bears N.W. and S.E.

Descend .

- 9.00 Creek, 3 lks. wide, 3 ins. deep, in bottom of hollow, 50
 ft. below ridge, course S. 30° E. The water in this creek
 rises about 3.00 chs. N. 30° W.

East Boundary of T.13 S., R.14 E. -Continued.

Chains Ascend.

11.00 Leave timber and enter dense sage and service berry brush, bears E. and W.

33.00 Top of ridge, 200 ft. above canon, bears N.E. and S.W.
Leave sage and service berry brush and enter dense aspen sapplings, bears N.E. and S.W.

Descend.

40.00 Set a sandstone, 18x8x4 ins., 12 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

53.00 Foot of descent, 150 ft. below ridge, bears N. 40° E. and S. 60° W. Thence over rolling mesa.

62.50 Leave aspen sapplings and enter dense sage brush, bears N. 60° E. and S. 80° W.

78.50 Enter dense aspen sapplings and scattering aspen timber, bears E. and W.

80.00 Set a sandstone, 20x12x4 ins., 15 ins. in the ground, for cor. of secs. 19, 24, 25, and 30, marked with 2 notches on S. and 4 notches on N. edges; from which

An aspen, 4 ins. diam., bears N. 51° E., 37 lks. dist., marked T.13 S., R.15 E., S.19, B.T.

An aspen, 4 ins. diam., bears S. 61° E., 38 lks. dist., marked T.13 S., R.15 E., S.30, B.T.

An aspen, 4 ins. diam., bears S. 63° W., 35 lks. dist., marked T.13 S., R.14 E., S.25, B.T.

An aspen, 4 ins. diam., bears N. 63° W., 34 lks. dist., marked T.13 S., R.14 E., S.24, B.T.

Land, mountainous and rolling mesa.

Soil, gravelly; 3rd rate.

Timber, pine and aspen.

Undergrowth, aspen sapplings, sage and service berry brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

 East Boundary of T.13 S., R.14 E. -Continued.

Chains

North, bet. secs. 19 and 24.

Over rolling mesa; through dense aspen sapplings and scattering aspen timber.

40.00 Set a limestone, 24x14x4 ins., 18 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Leave mesa, bears N.E. and S.W.

Descend .

54.75 Creek, 1 lk. wide, 2 ins. deep, in bottom of hollow, 100 ft. below mesa, course N. 40° E.

A large spring bears N. 40° E. about 10.00 chs. dist.

Ascend .

80.00 Set a limestone, 18x7x4 ins., 12 ins. in the ground, for cor. of secs. 13, 18, 19, and 24, marked with 3 notches on N. and 3 notches on S. edges; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, mountainous and rolling mesa.

Soil, gravelly; 3rd rate.

Timber, pine and aspen.

Undergrowth, aspen sapplings and sage brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth, 80.00 chs.

August 2, 1902: At the noon hour the sky is overcast and solar observations are impossible.

North, bet. secs. 13 and 18.

Over mountainous land; through dense undergrowth and scattering timber.

Ascend .

10.00 Top of ridge, 50 ft. above sec. cor., bears N.W. and S.W.

East boundary of T.13 S., R.14 E. -Continued.

Chains

Descend .

37.00 Bottom of hollow, 50 ft. below ridge, course W.

Ascend .

39.00 Leave undergrowth and enter heavy pinion pine and cedar timber, bears E, and W.

40.00 Set a sandstone, 22x14x4 ins., 16 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{4}$ on W. face; from whichA pinon pine, 5 ins. diam., bears N. 25° E., 40 lks. dist., marked $\frac{1}{4}$ S. 18, B. T.A pinon pine, 8 ins. diam., bears S. 85° W., 50 lks. dist., marked $\frac{1}{4}$ S. 13, B. T.

47.00 Top of ridge, 100 ft. above hollow, bears N. 30° E. and S. 30° W.

Descend .

50.00 Leave heavy and enter scattering timber, bears E. and W.

60.00 Hollow, 100 ft. below ridge, course W.; ascend .

79.00 Top of ridge, 250 ft. above hollow, bears N. W. and S. E.

80.00 Set a sandstone, 16x9x4 ins., 11 ins. in the ground, for cor. of secs. 7, 12, 13, and 18, marked with 2 notches on N. and 4 notches on S. edges; from which

A red pine, 10 ins. diam., bears N. 79° E., 160 lks. dist., marked T. 13 S., R. 15 E., S. 7, B. T.

A red pine, 5 ins. diam., bears S. 8° E., 90 lks. dist., marked T. 13 S., R. 15 E., S. 18, B. T.

A pinon pine, 9 ins. diam., bears S. 47° W., 55 lks. dist., marked T. 13 S., R. 14 E., S. 13, B. T.

A pinon pine, 13 ins. diam., bears N. 86° W., 85 lks. dist., marked T. 13 S., R. 14 E., S. 12, B. T.

Land, mountainous .

Soil, sandy and gravelly loam; 2nd rate .

Timber, pine and aspen.

Undergrowth, oak, sage brush and aspen sapplings.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered

East Boundary of T.13 S., R.14 E. -Continued.

Chains with dense undergrowth, 80.00 chs.

August 2, 1902.

August 3, 1902: At 7 h 3 m a.m., l.m.t., I set off $39^{\circ} 42' N.$, on the lat. arc; $17^{\circ} 42' N.$, on the decl. arc; and determine a true meridian, with the solar, at the cor. of secs. 7, 12, 13, and 18.

Thence I run

North, bet. secs. 7 and 12.

Over mountainous land; through scattering timber and scattering undergrowth.

Descend .

15.50 Foot of descent, 200 ft. below sec. cor., bears $N. 75^{\circ} E.$ and $S. 75^{\circ} W.$

Enter bottom of Dry Canon.

Enter heavy cottonwood timber, bears with canon.

18.50 Wash, 30 lks. wide, 12 ft. deep, (now dry) course $N. 75^{\circ} E.$

20.50 Leave timber, bears E. and W.

21.50 Leave canon bottom, bears $N. 75^{\circ} E.$ and $S. 75^{\circ} W.$

Ascend abruptly through scattering timber.

27.00 Top of ridge, 150 ft. above canon, bears N.W. and S.E.

Descend .

35.50 Bottom of hollow, 125 ft. below ridge, course $S. 20^{\circ} E.$

Ascend abruptly over a series of ledges .

40.00 Set a sandstone, $18 \times 7 \times 4$ ins., 12 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which

A red pine, 10 ins. diam., bears $S. 15^{\circ} E.$, 70 lks. dist., marked $\frac{1}{2}$ S. 7, B.T.

A pinon pine, 12 ins. diam., bears $N. 80^{\circ} W.$, 20 lks. dist., marked $\frac{1}{2}$ S. 12, B.T.

55.00 Top of ridge, 200 ft. above hollow, bears N.E. and S.W.

Descend .

69.75 Bottom of hollow, 50 ft. below ridge, course S.W.

Ascend .

East boundary of T.13 S., R.14 E.-Continued.

Chains

73.00 Top of ridge, 100 ft. above hollow, bears N. 30° W. and S. 30° E.

Leave ledges, bears with ridge.

Descend .

77.50 Bottom of hollow, 50 ft. below ridge, course S. 30° E.

Ascend .

80.00 Set a limestone, 30x8x4 ins., 22 ins. in the ground, for cor. of secs. 1, 6, 7, and 12, marked with 1 notch on N. and 5 notches on S. edges; from which

A pinon pine, 15 ins. diam., bears N. 52° E., 45 lks. dist., marked T.13 S., R.15 E., S. 6, B.T.

A pinon pine, 15 ins. diam., bears S. 45° E., 48 lks. dist., marked T.13 S., R.15 E., S. 7, B.T.

A pinon pine, 11 ins. diam., bears S. 75° W., 80 lks. dist., marked T.13 S., R.14 E., S. 12, B.T.

A pinon pine, 14 ins. diam., bears N. 82° W., 55 lks. dist., marked T.13 S., R.14 E., S. 1, B.T.

Land, mountainous.

Soil, gravelly and rocky; 3rd and 4th rate.

Timber, pine and aspen and cedar, and cottonwood.

Undergrowth, oak and sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, 80.00 chs.

North, bet. secs. 1 and 6.

Over mountainous land; through scattering timber.

Ascend .

13.00 Top of ridge, 100 ft. above sec. cor., bears E. and W.

Descend .

39.10 Set temp. cor. of Tps. 12 and 13 S., Rs. 14 and 15 E.

39.90 The permanent cor. was established at 39.90 chs. Note: For description of permanent cor. see notes of

the north boundary of Tp. 13 S., R. 14 E.

Land, mountainous.

Soil, gravelly; 3rd rate.

East boundary of T.13 S., R.14 E. - Concluded.

Chains Timber, pine and aspen.

Good grass for grazing.

Mountainous land, 39.90 chs.

August 3, 1902: At the noon hour the sky is overcast and solar observations are impossible.

North Boundary of T.13 S., R.14 E.

From the temp. cor. of Tps. 12 and 13 S., Rs. 14 and 15 E., described on previous page,

I run

West, on a random line along North boundary of Tp., setting temp. $\frac{1}{2}$ sec. and sec. cors. at intervals of 40.00 chs., and at 480.44 chs. fall 80 lks. South of the closing cor. of Tps. 13 S., Rs. 13 and 14 E., heretofore described. I abandon the random line as per "Special Instructions" and proceed to survey the North boundary of the township as follows:

August 3, 1902.

August 4, 1902: At 7 h 2 m a.m., l.m.t., I set off $39^{\circ} 43' N.$, on the lat. arc; $17^{\circ} 26' N.$, on the decl. arc; and determine a true meridian with the solar at the closing cor. of Tps. 13 S., R. 13 and 14 E., heretofore described.

Thence I run

East, on a true line bet. secs. 6 and 31.

Over mountainous land; through dense undergrowth; ascend .

2.00 Top of spur, 50 ft. above cor., bears N. and S.:

Descend .

4.50 Enter heavy timber and leave undergrowth, bears N. and

North boundary of T.13 S., R.14 E. -Continued.

Chains S.

33.50 Bottom of Sheep Canon, 200 ft. below ridge, course N. W.
Creek in bottom, 2 lks. wide, 2 ins. deep.

Ascend .

40.44 Set a sandstone, 20x10x4 ins., 15 ins. in the ground,
for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; from which
A pinon pine, 4 ins. diam., bears N. 20° W., 50 lks.
dist., marked $\frac{1}{2}$ S. 31, B. T.
A pinon pine, 6 ins. diam., bears S. 20° E., 50
lks. dist., marked $\frac{1}{2}$ S. 6, B. T.

Ascend more abruptly over ledges.

59.00 Leave ledges, bears N. and S.

Leave timber and enter dense undergrowth, bears
N. and S.

66.00 Top of ridge (divide) 1200 ft. above canon, bears
N. W. and S. E.

Descend .

80.44 Set a sandstone, 24x10x4 ins., 18 ins. in the ground, for
cor. of secs. 5, 6, 31, and 32, marked with 5 notches on
E. and 1 notch on W. edges; and raise a mound of stone,
2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
Land, mountainous.

Soil, gravelly; 3rd rate.

Timber, pine and aspen.

Undergrowth, oak, sage and aspen sapplings.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered
with dense undergrowth, 80.44 chs.

East, on a true line bet. secs. 5 and 32.

Over mountainous land; through dense undergrowth.

Descend ;

2.00 Bottom of swale , 100 ft. below last ridge, course N.
45° E.

Ascend .

 North Boundary of T.13 S., R.14 E. -Continued.

Cahins

Ascend .

16.40 Top of ridge, 75 ft. above canon, bears N. and S.

Descend .

40.00 Set a sandstone, 18x10x6 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

46.50 Bottom of hollow, 150 ft. below ridge, course N.

Ascend .

68.00 Top of ridge, 150 ft. above hollow, bears N. E. and S. W.

Descend .

80.00 Set a sandstone, 18x10x8 ins., 12 ins. in the ground, for cor. of secs. 4, 5, 32, and 33, marked with 4 notches on E. and 2 notches on W. edges; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, mountainous .

Soil, gravelly; 3rd rate.

No Timber,

Undergrowth, oak and sage brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth, 80.00 chs.

 East, on a true line bet. secs. 4 and 33.

Over mountainous land; through dense undergrowth:

Descend .

14.00 Leave undergrowth, and enter heavy timber, bears N. and S.

18.50 Leave timber and enter dense undergrowth, bears N. and S.

Creek, 2 lks. wide, 2 ins. deep, in bottom of Stone Cabin Canon, 150 ft. below ridge, course S. 25° E.

Ascend .

North Boundary of T.13 S., R.14 E. -Continued.

Chains:

34.00 Top of ridge, 150 ft. above canon, bears N. and S.

Descend .

40.00 Set a sandstone, 20x10x4 ins., 15 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

66.00 Enter heavy timber, bears N. and S.

70.00 Creek, 4 lks. wide, 3 ins. deep, in bottom of Stone Cabin Canon, 150 ft. below ridge, course N. 85° E.

Ascend .

80.00 Set a sandstone, 24x10x4 ins., 18 ins. in the ground, for cor. of secs. 3, 4, 33, and 34, marked with 3 notches on E. and 3 notches on W. edges; from which

An aspen, 6 ins. diam., bears N. 35° E., 50 lks. dist., marked T.12 S., R.14 E., S.34, B.T.

An aspen, 6 ins. diam., bears S. 40° E., 180 lks. dist., marked T.13 S., R.14 E., S.3, B.T.

An aspen, 5 ins. diam., bears S. 50° W., 89 lks. dist., marked T.13 S., R.14 E., S.4, B.T.

An aspen, 5 ins. diam., bears N. 40° W., 75 lks. dist., marked T.12 S., R.14 E., S.33, B.T.

Land, mountainous.

Soil, gravelly; 3rd rate.

Timber, aspen and pine.

Undergrowth, oak and sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

August 4, 1902: At this cor. I set off 17° 22' N., on the decl. arc; and at 0 h 3 m p.m., l.m.t., observe the sun on the meridian, the resulting lat. is 39° 43' N.

East, on a true line bet. secs. 3 and 34 .

North Boundary of T.13 S., R.14 E. -Continued.

- Chains Over mountainous land; through heavy timber; descend .
- 11.00 Creek, 4 lks. wide, 2 ins. deep, in bottom of Stone Cabin Canon, 50 ft. below sec. cor., course S. 70° E.
- Ascend .
- 20.00 Top of ridge, 50 ft. above canon, bears N. and S.
- Descend .
- 40.00 Set a sandstone, 18x6x4 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from which
- An aspen, 5 ins. diam., bears S. 3° E., 102 lks. dist., marked $\frac{1}{4}$ S. 3, B.T.
- No other trees within limits; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
- 48.50 Leave timber and enter dense undergrowth, bears N. 50° W. and S. 50° E.
- 48.75 Bottom of Stone Cabin Canon, 50 ft. below ridge, course N. 50° E.
- Ascend .
- 66.50 Top of ridge, 400 ft. above canon, bears N. 20° E. and S. 20° W.
- Descend .
- 68.00 Leave undergrowth and enter heavy timber, bears N. and S.
- 80.00 Set a sandstone, 20x12x8 ins., 15 ins. in the ground, for cor. of secs. 2, 3, 34, and 35, marked with 2 notches on E. and 4 notches on W. edges; from which
- A pinon pine, 10 ins. diam., bears N. 65° E., 75 lks. dist., marked T. 12 S., R. 14 E., S. 35, B.T.
- A pinon pine, 14 ins. diam., bears S. 45° E., 100 lks. dist. marked T. 13 S., R. 14 E., S. 2, B.T.
- A cedar, 8 ins. diam., bears S. 68° W., 75 lks. dist. marked T. 13 S., R. 14 E., S. 3, B.T.
- A pinon pine, 12 ins. diam., bears N. 25° W., 135 lks. dist., marked T. 12 S., R. 14 E., S. 34, B.T.
- Land, mountainous.
- Soil, gravelly; 3rd rate.

North Boundary of T.13 S., R.14 E. -Continued.

Chains Timber, pine and cedar and aspen.
 Undergrowth, oak and sage brush.
 Good grass for grazing.
 Mountainous or heavily timbered land, or land covered
 with dense undergrowth, 80.00 chs.

East, on a true line bet. secs. 2 and 35.

Over mountainous land, through heavy timber; descend.

- 6.00 Leave timber and enter dense undergrowth, bears N.
 and S.
- 6.20 Bottom of hollow, 100 ft. below sec. cor., course N. 40° E.
 Ascend .
- 20.00 Top of ridge, 100 ft. above hollow, bears N. 20° E. and S.
 Descend .
- 30.00 Bottom of hollow, 100 ft. below ridge, course N.
 Ascend .
- 40.00 Set a sandstone, 19x6x4 ins., 13 ins. in the ground,
 for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; and raise a mound
 of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impractic-
 able.
- 47.00 Top of spur, 200 ft. above hollow, bears N. and S.
 Descend .
- 51.00 Bottom of hollow, 250 ft. below spur, course N.
 Ascend .
- 80.00 Set a sandstone, 24x10x11 ins., 18 ins. in the ground,
 for cor. of secs. 1, 2, 35, and 36, marked with 1 notch
 on E. and 5 notches on W. edges; and raise a mound
 of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits imprac-
 ticable.
 Land, mountainous.
 Soil, gravelly; 3rd rate.
 Timber, pine and cedar and aspen.
 Undergrowth, oak, deer, and sage brush.
 Good grass for grazing.

North Boundary of T.13 S., R.14 E. - Concluded.

Chains Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

East, on a true line bet. secs. 1 and 36.

Over mountainous land; through dense undergrowth.

Ascend .

3.50 Top of ridge, 50 ft. above sec. cor., bears N. 60° E. and S. 60° W.; descend through scattering timber.

40.00 Set a sandstone, 18x 8x4 ins., 12 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; from which

A pinon pine, 13 ins. diam., bears N. 36° W., 40 lks. dist., marked $\frac{1}{2}$ S. 36, B. T.

A pinon pine, 10 ins. diam., bears S. 38° W., 65 lks. dist., marked $\frac{1}{2}$ S. 1, B. T.

46.00 Leave timber, bears N. E. and S. W.

49.00 Bottom of hollow, 500 ft. below ridge, course N. 60° E.

Ascend .

51.00 Enter aspen timber, bears N. and S.

57.00 Leave timber, bears N. and S.

65.00 Enter scattering timber, bears N. and S.

80.00 Intersect E. bdy. of Tp., 80 lks. North of the temp. cor. set from the south. I destroy temp. cor and at my intersection

Set a sandstone, 20x11x10 ins., 15 ins. in the ground for cor. of Tps. 12 and 13 S., Rs. 14 and 15 E., marked 12 S., on N. E., 15 E., on S. E., 13 S. on S. W., and 14 E., on N. W. faces; with 6 notches on each edge; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, S. of cor. Pits impracticable.

Land, mountainous.

Soil, gravelly; 3rd rate.

Timber, pine and aspen.

Undergrowth, oak and sage brush.

Good grass for grazing.

Mountainous land, or land covered with dense under-

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Boundaries of T.13 S., R.14 E.

growth, 80.00 chs.

August 4, 1902.

Latitudes, departures, and closing errors.

Line Designated	True bearing	dist- ance chs.	Latitudes		Departures	
			N.	S.	E.	W.
S.bdy.T.13 S.,R.14 E.	N.89° 52' W.	79.88	.19 ✓			79.88 ✓
S.bdy.T.13 S.,R.14 E.	N.89° 50' W.	79.72	.23 ✓			79.72 ✓
S.bdy.T.13 S.,R.14 E.	N.89° 50' W.	80.06	.23 ✓			80.06 ✓
S.bdy.T.13 S.,R.14 E.	N.89° 54' W.	80.13	.14 ✓			80.13 ✓
S.bdy.T.13 S.,R.14 E.	N.89° 49' W.	80.20	.02 ✓			80.20 ✓
S.bdy.T.13 S.,R.14 E.	N.89° 49' W.	80.70	.02 ✓			80.70 ✓
W.bdy.T.13 S.,R.14 E.	North	439.98	439.98			
N.bdy.T.13 S.,R.14 E.	East	480.44			480.44	
E.bdy.T.13 S.,R.14 E.	South	439.90		439.90		
Convergency					.60	
Totals			440.81	439.90	481.04	480.69
Error in lat.			439.90		480.69	
			.91 ✓			
Error in dep.					.35 ✓	

This township is mostly high rolling mountains, well watered and well timbered. It is very well adapted for grazing and should be subdivided.

John R Stewart

August 4, 1902.

U.S. Deputy Surveyor.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by _____

_____, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of _____

showing the respective capacities in which they acted:

- _____, Chairman.
- _____, Chairman.
- _____, Moundman.
- _____, Moundman.
- _____, Arman.
- _____, Arman.
- _____, Flagman.

For field officials see Book M. p. 115.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____

_____, United States Deputy Surveyor, in surveying all those parts or portions of the _____

_____ of the _____ meridian, _____ of _____, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for _____

- _____, Chairman.
- _____, Chairman.
- _____, Moundman.
- _____, Moundman.
- _____, Arman.
- _____, Arman.
- _____, Flagman.

For field officials see Book M. p. 115.

Subscribed and sworn to before me this _____ day of _____, 189 _____



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from _____ United States Surveyor General for _____, bearing date of the _____ day of _____, 189____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____ of the _____ meridian, in the _____ of _____, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

United States Deputy Surveyor.

Subscribed by said _____, and sworn to before me }
 this _____ day of _____, 189____ }



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL.

Salt Lake City, Utah, January 18 1904, 189____

The foregoing field notes of the survey of *the East North Branches of Township 13 South Range 14 East of the Salt Lake Base & Meridian, Utah*

executed by *John A. Stewart* under his contract No. *250*, dated *January 2, 1902*, 189____, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Edward Mendenhall
 United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General.

Filed Nov. 3, 1902.

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4-679.

I

BOOK A-294

Elmer Smith

Ed Smith

H.S.B.

FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISION

of

Township No. 13 South, Range No. 14 East,

Of the Salt Lake Base and Meridian,

in the STATE OF UTAH

AS SURVEYED BY

John R. Stewart, United States Deputy Surveyor,

Under his Contract No. 250, dated January 2, 1902. ~~x189~~xx

Survey commenced August 5, 1902. ~~x189~~xx

Survey completed August 16, 1902. ~~x189~~xx

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rough 5743.02'

NAMES AND DUTIES OF ASSISTANTS.

Myrum G. Smith Chairman

John G. Smith Chairman

Jacob A. Acord Moundamn

Edwin A. Peay Moundman

Joseph A. Passey Axman

Andy J. Stewart Axman

Otto R. Stewart Flagman

In preliminary affidavits in book A: H. B. R. C.

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117 ⁷	212 ⁸	195 ⁹	184 ¹⁰	173 ¹¹	162 ¹² 134
211	210	195	183	172	161
116 ¹⁸	208 ¹⁷	193 ¹⁶	182 ¹⁵	170 ¹⁴	160 ¹³ 132
207	206	193	181	169	159
114 ¹⁹	205 ²⁰	191 ²¹	179 ²²	168 ²³	158 ²⁴ 132
204	203	191	178	168	157
113 ³⁰	202 ²⁹	189 ²⁸	177 ²⁷	167 ²⁶	156 ²⁵ 130
201	200	188	176	166	155
112 ³¹	198 ³²	187 ³³	175 ³⁴	165 ³⁵	154 ³⁶ 129
110	110	109	109	109	108

Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, and
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of

....., *Chainman.*

....., *Chainman.*

Subscribed and sworn to before me this }
day of, 189 }



WE, and
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of

....., *Moundman.*

....., *Moundman.*

Subscribed and sworn to before me this }
day of, 189 }



WE, and
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of

....., *Axman.*

....., *Axman.*

Subscribed and sworn to before me this }
day of, 189 }



I,, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of

....., *Flagman.*

Subscribed and sworn to before me this }
day of, 189 }



SUBDIVISION OF T. 13 S. R. 14 E.

Survey commenced August 5, 1902, and executed with a W. and L. E. Gurley light mountain transit, No. 1, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other reading to single minutes of arc, which is also the least count of the latitude and declination arcs.

The instrument was examined, tested on the true meridian at Salt Lake City, found correct, and was approved by the Surveyor General for Utah, on June 14, 1902.

I examine the adjustments of the instrument, and correct the level and collimation errors, then, to test the solar apparatus, by comparing its indications resulting from solar observations made during p. m. and a. m. hours, with a true meridian, established by observation on Polaris, I proceed as follows:-
At the cor. of secs. 1, 2, 35, and 36, on S. bay. of Tp. heretofore described, latitude $39^{\circ}38'N.$, longitude $110^{\circ}20'38''W.$ I set off $39^{\circ}38'N.$ on the lat. arc, $17^{\circ}03'N.$ on the decl. arc, and at 4 h. 59 m. p. m. l. m. t. determine a true meridian with the solar, and mark a point thereof on a stone set firmly in the ground 5.00 chs. N. of the corner.

At 10 h. 33. m. p. m. l. m. t. I observe Polaris at eastern elongation, in accordance with the Manual, and mark a point, in the line thus determined, by a tack driven in a wooden plug, set in the ground E. of the stone already set 5.00 chs. N. of the corner.

August 5, 1902.

August 6, 1902. At 6 h. 30 m. a. m. l. m. t. I lay off the azimuth of Polaris $1^{\circ}35'$ to the W., and mark a point

SUBDIVISION OF T. 13 S. R. 14 E. -CONTINUED.

CHAINS. in the true meridian thus determined by cutting a small groove in the stone already set 5.00 chs. N. of the corner, on which the true meridian falls, .38 in. E. of the true meridian determined by the solar. At 7 h. 0 m. a. m. l. m. t., I set off $39^{\circ}38'N.$ on the lat. arc $16^{\circ}54'N.$ on the decl. arc, and mark a point in the true meridian determined by the solar by a cross on the stone 5.00 chs. N. of the corner. This mark falls .38 in. E. of the true meridian established by the Polaris observation.

The solar apparatus by p. m. and a. m. observations defines positions for true meridians respectively about $0'20'' W.$ and $0'20'' E.$ of the true meridian established by Polaris observations, therefore I conclude that the adjustments of the instrument are satisfactory. The magnetic bearing of the true meridian at 7 h. 30 m. a. m. l. m. t. is $16^{\circ}19.7'W.$, the angle thus determined reduced by the table page 100 of the Manual, gives the mean mag. decl. $16^{\circ}14'E.$

From the cor. of secs. 1-2-35 and 36, on S. Bdy. of Tp. heretofore described, I run

N. $0^{\circ}01'W.$ bet secs. 35 and 36

Over mountainous land, through heavy pine timber.

Descend.

2.00 Bottom of Cottonwood Canon, 10 ft. below sec. cor., course N. $60^{\circ}E.$; ascend.

3.00 Leave heavy and enter scattering timber, bears N. $60^{\circ}E.$ and S. $60^{\circ}W.$

20.00 Edge of mesa, 200 ft. above canon, bears N. $60^{\circ}E.$ and S. $60^{\circ}W.$

Thence over rolling mesa.

SUBDIVISION OF T. 13 S. R. 14 E. -CONTINUED.

CHAINS.

Enter heavy timber.

40.00

Set a limestone 24x10x4 ins. 18 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face, from whichA pine 7 ins. diam. bears E. 12 lks. dist., marked $\frac{1}{2}$ S. 36 B.T.An aspen 9 ins. diam. bears W. 19 lks. dist., marked $\frac{1}{2}$ S. 35 B.T.

60.00

Leave mesa, bears E. and W.

Descend.

80.00

Set a sandstone 24x8x4 ins. 18 ins. in the ground for cor. of secs. 25-26-35 and 36, marked with 1 notch on the S. and 1 notch on the E. edges, from which

A balsam 7 ins. diam. bears N. 33° E. 30 lks. dist. marked T. 13 S. R. 14 E. S. 25 B.T.

A balsam 6 ins. diam., bears S. 30° E. 20 lks. dist. marked T. 13 S. R. 14 E. S. 30 B.T.

A balsam 9 ins. diam. bears S. 50° W. 50 lks. dist. marked T. 13 S. R. 14 E. S. 35 B.T.

A red pine 13 ins. diam. bears N. 27° W. 65 lks. dist., marked T. 13 S. R. 14 E. S. 20 B.T.

Land mountainous and rolling mesa.

Soil black loam, 1st. rate.

Timber pine and aspen.

Good grass for grazing.

Mountainous, or heavily timbered land 80.00 chs.

S. 89° 52' E. on a random line bet. secs. 25 and 36

40.00

Set temp. $\frac{1}{2}$ sec. cor.

79.96

Intersect E. Bdy. of Tp. 5 lks. N. of the cor. of secs. 25-30-31 and 36. Thence I run.

N. 89° 54' W. on a true line bet. secs. 25 and 36

Over mountainous land, through heavy timber.

Descend.

SUBDIVISION OF T. 13 S. R. 14 E. -CONTINUED.

CHAINS.	
4.50	Bottom of hollow 20 ft. below sec. cor., course N. E. Ascend.
38.00	Top of ridge 200 ft. above hollow, bears N. E. and S. W. Descend.
39.98	Set a sandstone 22x8x4 ins. 16 ins. in the ground for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face, from which A red pine 11 ins. diam. bears N. 45 lks. dist. marked $\frac{1}{2}$ S. 25 B. T. No other trees within limits, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high N. of cor. Pits impracticable.
60.00	Bottom of hollow 150 ft. below ridge, course N. 30° E. Ascend.
72.50	Top of ridge 30 ft. above hollow bears N. 30° E. and S. 30° W. Descend.
79.96	Cor. of secs. 25-26-35 and 36. Land mountainous. Soil black loam, 1st. rate. Timber pine and aspen. Good grass for grazing. Mountainous or heavily timbered land 79.96 chs.
	N. 0° 01' W. bet. secs. 25 and 26 Over mountainous land, through heavy timber. Descend.
10.50	Bottom of hollow 200 ft. below sec. cor. course N. E. Ascend.
14.30	Leave heavy and enter scattering timber.
40.00	Set a sandstone 22x11x4 ins. 16 ins. in the ground for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face, from which An aspen 4 ins. diam. bears S. 68° E. 85 lks. dist. marked $\frac{1}{2}$ S. 25 B. T.

SUBDIVISION OF T. 13 S. R. 14 E. - CONTINUED.

CHAINS.

- An aspen 4 ins. diam. bears W. 115 lks. dist., marked $\frac{1}{4}$ S. 26 B.T.
- 50.00 Top of ridge 200 ft. above hollow, bears N. E. and S. W.
Descend.
- 69.50 Enter heavy timber bears E. and W.
- 80.00 Set a sandstone 18x12x4 ins. 12 ins. in the ground, for cor. of secs. 23-24-25 and 26, marked with 2 notches on S. and 1 notch on E. edges, from which
- An aspen 5 ins. diam. bears N. 43° E. 40 lks. dist. marked T. 13 S. R. 14 E. S. 24 B.T.
- An aspen 7 ins. diam. bears S. 40° E. 15 lks. dist. marked T. 13 S. R. 14 E. S. 25 B.T.
- An aspen 8 ins. diam. bears S. 31° W. 48 lks. dist. marked T. 13 S. R. 14 E. S. 26 B.T.
- An aspen 11 ins. diam. bears N. 41° W. 51 lks. dist. marked T. 13 S. R. 14 E. S. 23 B.T.
- Land mountainous.
- Soil black loam, 1st. rate.
- Timber pine and aspen.
- Good grass for grazing.
- Mountainous or heavily timbered land 80.00 chs.
-
- S. 89° 54' ³⁵ E. on a random line bet. secs. 24 and 25
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.00 Intersect E. bdy. of Tp. 14 lks. S. of the cor. of secs. 19-24-25 and 30, heretofore described.
- Thence I run
- W. on a true line bet. secs. 24 and 25
- Over rolling mesa, through heavy timber.
- 7.50 Leave timber, and enter dense undergrowth bears E. and W.
- 17.50 Leave mesa, bears N. 10° W. and S. 10° E.
Descend.
- 33.40 Bottom of hollow 125 ft. below mesa, course N.

SUBDIVISION OF T. 13 S. R. 14 E. -CONTINUED.

CHAINS.	Ascend.
40.00	Set a sandstone 18x9x5 ins. 12 ins. in the ground for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high N. of cor. Pits impracticable.
52.50	Top of ridge 150 ft. above hollow, bears N. 30° E. and S. 30° W.
68.50	Enter scattering timber bears N. and S.
80.00	Cor. of secs. 23-24-25 and 26. Land mountainous. Soil black loam and gravelly; 1st. and 3rd. rate. Timber pine and aspen. Undergrowth sage and deer brush. Good grass, for grazing. Mountainous or heavily timbered land, or land covered with dense undergrowth 80.00 chs. August 6, at this cor. I set off 13° 49' N. on the decl. arc, and at 0 h. 2 m. p. m. l. m. t. observe the sun on the meridian, the resulting lat. is 39° 40' N.
	North 0.01' W. bet. secs. 23 and 24 Over mountainous land, through heavy timber. Descend.
7.50	Bottom of hollow 40 ft. below sec. cor., course N. 60° E.; ascend.
8.50	Leave timber and enter dense undergrowth bears N. 60° E. and S. 60° W.
32.50	Top of ascent 100 ft. above hollow, bears N. E. and S. W. Thence over rolling mesa.
40.00	Set a sandstone 18x9x4 ins. 12 ins. in the ground for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face, dig pits 18x18x12 ins. N. and S. of stone 3 ft. dist., and raise a mound of earth 4 ft. base 2 ft. high W. of cor.

SUBDIVISION OF T. 13 S. R. 14 E. - CONTINUED.

CHAINS.

80.00 Set a sandstone 24x14x4 ins. 18 ins. in the ground for cor. of secs. 13-14-23 and 24, marked with 3 notches on S. and 1 notch on E. edges, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor.
Pits impracticable.
Land mountainous, and rolling mesa.
Soil black loam and gravelly; 1st. and 3rd. rate.
Timber pine and aspen.
Undergrowth oak and deer brush.
Good grass for grazing.
Mountainous or heavily timbered land, or land covered with dense undergrowth 80.00 chs.

E. on a random line bet. secs. 13 and 24

40.00 Set temp. $\frac{1}{2}$ sec. cor.

80.18 Intersect E. bdy. of Tp. 14 lks. N. of the cor. of secs. 13-18-19 and 24, heretofore described.
Thence I run
N. $89^{\circ}54'$ W. on a true line bet. secs. 13 and 24
Over mountainous land through dense undergrowth.
Ascend.

32.50 Top of ridge 60 ft. above sec. cor., bears N. 30° E. and S. 30° W.
Descend.

40.09 Set a limestone 18x9x5 ins. 12 ins. in the ground for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high N. of cor.
Pits impracticable.

50.00 Bottom of hollow 100 ft. below ridge, course N. 30° E.
Enter scattering timber.
Ascend.

52.50 Leave timber bears N. and S.

57.00 Top of ridge, 50 ft. above hollow, bears N. 30° E. and

SUBDIVISION OF T.13 S.R.14 E.-CONTINUED.

CHAINS. S. 30° W.
 Descend.
 66.00 Bottom of hollow 50 ft. below ridge course N. E.
 Ascend.
 73.00 Top of ascent, 50 ft. above hollow, bears N. and S.
 Thence over rolling mesa.
 80.18 Corner of secs. 13-14-23 and 24.
 Land mountainous and rolling mesa.
 Soil black loam and gravelly; 1st. and 3rd. rate.
 Timber pine and aspen.
 Undergrowth oak and deer brush.
 Good grass for grazing.
 Mountainous land, or land covered with dense under-
 growth 80.18 chs.
 August 6, 1, 1902.

Aug. 7, 1902, at 7 h. 0 m. a. m. l. m. t. I set off 39° 41' N.
 on the lat. arc, 16° 37' N. on the decl. arc, and deter-
 mine a true meridian with the solar at the cor. of
 secs. 13-14-23 and 24. Thence I run
 N. 0° 01' W. bet. secs. 13 and 14
 Over rolling mesa, through dense undergrowth.
 33.50 Leave mesa, bears N. E. and S. W.
 Descend.
 40.00 Set a sandstone 20x9x7 ins. 15 ins. in the ground for
 ½ sec. cor., marked ½ on W. face, and raise a mound of
 stone 2 ft. base 1½ ft. high W. of cor.
 Pits impracticable.
 74.00 Enter cottonwood timber bears E. and W.
 75.50 Creek 4 lks. wide 2 ins. deep, in bottom of Dry Canon,
 700 ft. below mesa, course E.
 Ascend.
 76.50 Leave timber bears E. and W.
 80.00 Set a limestone 18x12x4 ins. 12 ins. in the ground for

SUBDIVISION OF T. 13 S. R. 14 E. - CONTINUED.

CHAINS.

- cor. of secs. 11-12-13 and 14, marked with 4 notches on the S. and 1 notch on the E. edges, and raise a mound of stone 3 ft. base 1½ ft. high W. of cor. Pits impracticable.
- Land mountainous and rolling mesa.
- Soil gravelly and rocky; 3rd. and 4th. rates.
- Timber cottonwood.
- Undergrowth oak, sage, and deer brush.
- Good grass for grazing.
- Mountainous or heavily timbered land, or land covered with with dense undergrowth 80.00 chs.
-
- 40.00 S. 89° 54' E. on a random line bet. secs. 12 and 13 Set temp. ½ sec. cor.
- 80.36 Intersect E. bdy. of Tp. 10 lks. S. of the cor. of secs. 7-12-13 and 18. Thence I run
- N. 89° 58' W. on a true line bet. secs. 12 and 13
- Over mountainous land, through dense undergrowth.
- Ascend.
- 1.00 Top of ridge bears N.W. and S.E.
- Descend.
- 10.00 Bottom of hollow 100 ft. below ridge, course N. 10° E.
- ascend.
- 18.00 Top of ridge 80 ft. above hollow bears N. 30° E. and S. 30° W.
- Descend.
- 40.18 Set a limestone 18x11x4 ins. 12 ins. in the ground for ½ sec. cor., marked ½ on N. face, and raise a mound of stone 3 ft. base 1½ ft. high W. of cor. Pits impracticable.
- 51.50 Enter heavy timber, bears N. and S.
- 60.50 Leave timber bears N. and S.
- 66.25 Creek 3 lks. wide 3 ins. deep, bottom of Dry Canon, 200 ft. below ridge, course N. 70° E.

SUBDIVISION OF T. 13 S. R. 14 E. -CONTINUED.

CHAINS.

- 80.36 The cor. of secs. 11-12-13 and 14.
 Land mountainous.
 Soil gravelly; 3rd. rate.
 Timber aspen and cottonwood.
 Undergrowth oak and sage brush.
 Good grass for grazing.
 Mountainous or heavily timbered land, or land covered with dense undergrowth 80.36 chs.
-
- N. 0° 01' W. bet. secs. 11 and 12
 Over mountainous land, through dense undergrowth.
 Ascend.
- 27.50 Top of ridge 200 ft. above sec. cor., bears N. W. and S. E.
 Descend.
- 35.00 Enter mahogany timber, bears E. and W.
- 40.00 Set a sandstone 18x9x4 ins. 12 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face, from which
 A mahogany 14 ins. diam. bears S. 76° E. 30 lks. dist marked $\frac{1}{2}$ S. 12 B. T.
 A mahogany 11 ins. diam. bears N. 83° W. 60 lks. dist., marked $\frac{1}{2}$ S. 11 B. T.
- 40.50 Enter cedar and pinon pine timber; leave mahogany bears E. and W.
- 50.00 Leave timber bears E. and W.
- 52.00 Bottom of hollow 200 ft. below ridge, course S. E.
 Ascend.
- 70.00 Trail bears E. and W.
- 76.50 Top of ridge, divide between Dry Canon, and canon on N., bears N. 80° E. and S. 80° W.
 Descend.
- 80.00 Set a limestone 18x9x4 ins. 12 ins. in the ground for cor. of secs. 1-2-11 and 12, marked with 5 notches on

SUBDIVISION OF T. 13 S. R. 14 E. - CONTINUED.

CHAINS. S. and 1 notch on E. edges, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
 Land mountainous.
 Soil gravelly; 3rd. rate.
 Timber cedar, pine, and mahogany.
 Undergrowth ~~and~~ sage brush.
 Good grass for grazing.
 Mountainous, or heavily timbered land, or land covered with dense undergrowth 80.00 chs.
 Aug. 7, 1902: At this cor. I set off $16^{\circ}33'$ N. on the decl. arc, and at 0 h. 02 m. p. m. l. m. t., observe the sun on the meridian, the resulting lat. is $39^{\circ}42'$ N.

S. $89^{\circ}58'$ E. on a random line bet. secs. 1 and 12
 40.00 Set temp. $\frac{1}{2}$ sec. cor.
 80.18 Intersect E. bdy. of Tp. 15 lks. N. of the cor. of secs. 1-6-7 and 12. Thence I run
 N. $89^{\circ}52'$ W. on a true line bet. secs. 1 and 12
 Over mountainous land, through scattering timber, and scattering undergrowth.
 Descend.
 3.50 Bottom of hollow 25 ft. below sec. cor., course S. E.
 Ascend.
 40.09 Set a sandstone 18x10x4 ins. 12 ins. in the ground for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face, and raised a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high N. of cor.
 Pits impracticable.
 70.00 Top of divide ridge between Dry Canon and canon on N., 300 ft. above hollow, bears N. 80° E. and S. 80° W.
 Descend.
 80.18 Cor. of secs. 1-2-11 and 12.
 Land mountainous.
 Soil gravelly; 3rd. rate.

SUBDIVISION OF T.13 S.R.14 E. -CONTINUED.

CHAINS.

Timber pine, cedar, and mahogany.

Undergrowth oak and sage brush.

Good grass for grazing.

Mountainous land 80.18 chs.

N. $0^{\circ}01'$ W. on a random line bet.

Secs. 1 and 2.

39.76 Intersect N. bdy. of Tp. 4 lks. E. of the cor. of secs. 1-2-35 and 36, heretofore described.

Thence I run

S. $0^{\circ}02'$ E. on a true line bet. secs. 1 and 2

Over mountainous land, through scattering undergrowth
Ascend.

2.50 Top of ridge 25 ft. above sec. cor., bears N. 60° E. and
S. 60° W.

Descend.

3.00 Enter heavy timber bears E. and W.

18.50 Leave timber, bears E. and W.

21.00 Bottom of hollow 150 ft. below ridge, course N. 60° E.
Ascend.

39.76 The cor. of secs. 1-2-11 and 12.

Land mountainous.

Soil gravelly; 3rd. rate.

Timber cedar and pinon pine.

Undergrowth oak and sage brush.

Good grass for grazing.

Mountainous or heavily timbered land 39.76 chs.

Aug. 7, 1902.

Aug. 8, 1902: At 7 h. 0 m. a. m. l. m. t. I set off $39^{\circ}38'$ N. on the lat. arc $16^{\circ}20'$ N. on the decl. arc, and determine a true meridian with the solar, at the cor. of secs. 2-3-34 and 35, on S. bdy. of Tp. heretofore describ-

SUBDIVISION OF T. 13 S. R. 14 E. -CONTINUED.

CHAINS.	ed. Thence I run
	N. 0° 01' W. bet. secs. 34 and 35
7.00	Over mountainous land, through undergrowth. Ascend. Top of divide ridge, 25 ft. above sec. cor., bears N. W. and S. E. Descend.
9.50	Enter heavy timber bears E. and W.
40.00	Set a sandstone 16x12x4 ins. 12 ins. in the ground for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face, from which An aspen 7 ins. diam. bears N. 32° E. 120 lks. dist. marked $\frac{1}{2}$ S. 35 B.T. A pine 5 ins. diam. bears N. 74° W. 33 lks. dist. marked $\frac{1}{2}$ S. 34 B.T.
49.50	Bottom of hollow 200 ft. below ridge, course N. E. Ascend.
62.50	Top of ridge 100 ft. above hollow, bears N. 43° E. and S. 43° W. Descend.
78.50	Bottom of hollow 120 ft. below ridge, course N. 20° E. Ascend.
80.00	Set a sandstone 22x12x7 ins. 16 ins. in the ground for cor. of secs. 26-27-34 and 35, marked with 1 notch on S. and 2 notches on E. edges, from which An aspen 3 ins. diam. bears N. 4° W. 30 lks. dist. marked T. 13 S. R. 14 E. S. 27 B.T. No other trees within limits, and raise a mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high W. of cor. Pits impracti- cable. Land mountainous. Soil black loam; 1st. rate. Timber pine and aspen. Undergrowth oak, deer brush. Good grass for grazing. Mountainous or heavily timbered land 80.00 chs.

SUBDIVISION OF T.13 S.R.14 E.-CONTINUED.

CHAINS.

	S. $89^{\circ}50'$ E. on a random line bet. secs. 36 and 35
40.00	Set temp. $\frac{1}{2}$ sec. cor.
80.16	Intersect N. and S. line 37 lks. S. of the cor. of secs. 25-26-35 and 36. Thence I run
	S. $89^{\circ}54'$ W. on a true line bet. secs. 26 and 35
	Over mountainous land, through heavy timber.
	Descend.
5.00	Bottom of hollow 30 ft. below sec. cor. bears N. 25° E.
	Ascend.
28.50	Top of ridge 200 ft. above hollow, bears N. 20° E. and S. 20° W.
	Descend.
40.08	Set a sandstone $18 \times 10 \times 4$ ins. 12 ins. in the ground for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face, from which
	An aspen 4 ins. diam. bears N. 5° W. 40 lks. dist. marked $\frac{1}{2}$ S. 26 B.T.
	An aspen 5 ins. diam. bears S. 48° W. 70 lks. dist. marked $\frac{1}{2}$ S. 35 B.T.
55.50	Creek 3 lks. wide 2 ins. deep, in canon 500 ft. below ridge, course N. 30° E.
	Ascend.
62.50	Top of ridge 500 ft. above canon, bears N. 20° E. and S. 20° W.
	Descend.
79.00	Bottom of hollow 100 ft. below ridge, course N. 20° E.
	Ascend.
80.16	The cor. of secs. 26-27-34 and 35.
	Land mountainous.
	Soil gravelly; 3rd. rate.
	Timber pine and aspen.
	Undergrowth oak and sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land 80.16 chs.

SUBDIVISION OF T. 13 S. R. 14 E. -CONTINUED.

CHAINS.

	N. 0° 01' W. bet. secs. 26 and 27
	Over mountainous land, through scattering timber, and scattering undergrowth.
	Ascend.
17.00	Top of ridge 200 ft. above sec. cor., bears N. E. and S. W. Descend.
34.00	Bottom of hollow 60 ft. below ridge, course N. 30° W.
40.00	Set a sandstone 20x6x4 ins. 15 ins. in the ground for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face, from which A pine 7 ins. diam. bears N. 80° W. 37 lks. dist. marked $\frac{1}{2}$ S. 27 B. T. An aspen 4 ins. diam. bears S. 60° E. 123 lks. dist. marked $\frac{1}{2}$ S. 26 B. T.
43.00	Top of ridge 100 ft. above hollow, bears N. W. and S. E. Descend.
72.00	Creek 6 lks. wide, 3 ins. deep, bottom of canon, 800 ft. below ridge, course N. W. Ascend.
80.00	Set a sandstone 18x12x9 ins. 12 ins. in the ground, for cor. of secs. 22-23-26 and 27, marked with 2 notches on S. and 2 notches on E. edges, from which An aspen 5 ins. diam. bears N. 30° E. 60 lks. dist. marked T. 13 S. R. 14 E. S. 23 B. T. An aspen 5 ins. diam. bears N. 30° W. 54 lks. dist. marked T. 13 S. R. 14 E. S. 22 B. T. No other trees within limits; raised a mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high W. of cor. Pits impracticable. Land mountainous. Soil gravelly 3rd. rate. Timber pine and aspen. Undergrowth sagebrush. Good grass for grazing. Mountainous land 80.00 chs.

SUBDIVISION OF T. 13 S. R. 14 E. -CONTINUED.

CHAINS. August 8, 1902: At this cor. I set off $16^{\circ}16'$ N. on the decl. arc, and at 0 h. 3 m. p. m. l. m. t., observe the sun on the meridian; the resulting lat. is $39^{\circ}40'$ N.

N. $89^{\circ}54'$ E. on a random line bet. secs. 23 and 26

40.00 Set temp. $\frac{1}{2}$ sec. cor.

80.24 Intersect N. and S. line at the cor. of secs. 23-24-25 and 26. Thence I run

S. $89^{\circ}54'$ W. on a true line bet. secs. 23 and 26

Over mountainous land, through heavy timber.

Descend.

9.00 Bottom of hollow 100 ft. below sec. cor., course 4.60° E.

Ascend.

11.50 Leave timber, bears E. and W.

40.12 Set a limestone $18 \times 12 \times 4$ ins. 12 ins. in the ground for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face, and raised a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high N. of cor.

Pits impracticable.

43.80 Top of ridge 200 ft. above hollow, bears N.W. and S.E.

Descend.

45.00 Enter scattering timber bears N.W. and S.E.

80.24 The cor. of secs. 22-23-26 and 27.

Land mountainous.

Soil black loam; 1st. rate.

Timber pine, cedar, and mahogany.

Mountainous, or heavily timbered land 80.24 chs.

N. $0^{\circ}01'$ W. bet. secs. 22 and 23

Over mountainous land, through scattering timber and scattering undergrowth.

Ascend.

28.00 Top of ridge, 300 ft. above sec. cor., bears N. 60° W. and

SUBDIVISION OF T. 13 S. R. 14 E. -CONTINUED.

CHAINS.	S. 80° E.; descend.
40.00	Set a sandstone 18x9x7 ins. 13 ins. in the ground for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face, and raise a mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
51.00	Bottom of hollow 200 ft. below ridge, course N. W. Ascend.
77.25	Top of ridge 250 ft. above hollow, bears N. 30° W. and S. 30° E. Descend.
80.00	Set a sandstone 20x10x8 ins. 15 ins. in the ground, for cor. of secs. 14-15-23 and 24, marked with 3 notches on S. and 2 notches on E. edges, and raise a mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high W. of cor. Pits impracticable. Land mountainous. Soil gravelly; 3rd. rate. Timber pine and aspen. Undergrowth sage and oak brush. Good grass for grazing. Mountainous land 80.00 chs.
	N. 89° 54' E. on a random line bet. secs. 14 and 23
40.00	Set temp. $\frac{1}{2}$ sec. cor.
80.30	Intersect N. and S. line 15 lks. N. of the cor. of secs. 13-14-23 and 24, Thence I run W. on a true line bet. secs. 14 and 23. Over rolling mesa, through scattering timber.
10.00	Leave mesa, bears N. and S. Descend.
20.75	Bottom of hollow, 200 ft. below mesa, course N. 10° E. Ascend.
38.00	Top of ascent 200 ft. above hollow, bears N. 5° E. and S. 5° W. Thence over rolling mesa.

SUBDIVISION OF T. 13 S. R. 14 E. - CONTINUED.

- CHAINS. Enter heavy timber,
- 40.15 Set a sandstone 30x8x4 ins. 22 ins. in the ground for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face, from which
- An aspen 4 ins. diam. bears N. 10° E. 18 lks. dist. marked $\frac{1}{2}$ S. 14 B.T.
- An aspen 5 ins. dia. bears S. 58° W. 36 lks. dist. marked $\frac{1}{2}$ S. 23 B.T.
- 55.00 Leave mesa bears N. 20° E. and S. 20° W.
Descend.
- 56.00 Leave heavy and enter scattering timber bears N. and S.
- 79.00 Bottom of hollow 200 ft. below mesa, course N.W.
- 80.30 The cor. of secs. 14-15-22 and 23.
Land mountainous and rolling mesa.
Soil gravelly; 3rd. rate.
Timber pine and aspen.
Undergrowth sagebrush.
Mountainous or heavily timbered land 80.30 chs.
- August 8, 1902.
-
- August 9, 1902: At 7 h. 0 m. a. m. l. m. t. I set off 39° 41' N. on the lat. arc 16° 03' N. on the decl. arc and determine a true meridian with the solar at the cor. of secs. 14-15-22 and 23. Thence I run
- N. 0° 01' W. bet. secs. 14 and 15
- Over mountainous land, through dense undergrowth.
Descend.
- 1.25 Bottom of hollow 20 ft. below sec. cor., course N.W.
Ascend.
- 6.00 Top of spur, 30 ft. above hollow, bears E. and W.
Descend.
- 11.50 Foot of descent 200 ft. below spur, bears N.E. and S.W.
Enter bottom of Dry Canon.
Enter heavy cottonwood timber.

SUBDIVISION OF T. 13 S. R. 14 E. -CONTINUED.

CHAINS.

- 12.50 Wash 10 lks. wide 2 ft. deep, in canon, course N. E.
- 17.00 Leave timber, bears N. E. and S. W.
Leave canon bottom; ascend.
- 35.00 Top of ridge 50 ft. above canon, bears E. and W.
Descend.
- 40.00 Set a limestone 20x12x6 ins. 15 ins. in the ground,
for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face, and raise a mound
of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor.
Pits impracticable.
- 43.90 Bottom of hollow 60 ft. below ridge course E.
Ascend.
- 58.00 Top of ridge 250 ft. above hollow, bears N. 60° W. and
S. 60° E. Descend.
- 63.00 A spring on line; water from this spring runs E.
- 80.00 Set a sandstone 18x8x6 ins. 12 ins. in the ground for
cor. of secs. 10-11-14 and 15, marked with 4 notches
on S. and 2 notches on E. edges, from which
A pine 4 ins. diam. bears S. 51° E. 35 lks. dist.
marked T. 13 S. R. 14 E. S. 14 B. T.
A pine 20 ins. diam. bears S. 30° W. 245 lks. dist.
marked T. 13 S. R. 14 E. S. 15 B. T.
No other trees within limits, and raise a mound of
stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor.
Pits impracticable.
Land mountainous.
Soil gravelly; 3rd. rate.
Timber pine and aspen.
Undergrowth sage and oak.
Good grass for grazing.
Mountainous land, or heavily timbered land, or land
covered with dense undergrowth 80.00 cha.

SUBDIVISION OF T. 14 S. R. 14 E. -CONTINUED.

CHAINS.	E. on a random line bet. secs. 11 and 14
40.00	Set temp. $\frac{1}{2}$ sec. cor.
80.20	Intersect N. and S. line at the cor. of secs. 11-12-13 and 14. Thence I run West on a true line bet. secs. 11 and 14 Over mountainous land, through dense undergrowth. Ascend.
3.00	Enter scattering timber, bears N. E. and S. W.
27.50	Top of ridge 300 ft. above sec. cor., bears N. W. and S. E. Descend.
38.00	Bottom of hollow 150 ft. below ridge, course S. 30° E. Ascend.
40.10	Set a sandstone 24x14x6 ins. 18 ins. in the ground for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face, from which A pinon pine 5 ins. diam. bears S. 120 lbs. dist. marked $\frac{1}{2}$ S. 14 B. T. No other tree within limits, raise a mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high N. of cor. Pits impracticable.
50.00	Foot of perpendicular ledge bears N. 30° E. and S. 30° W.
57.00	Top of ridge 200 ft. above hollow, bears N. and S. Descend.
70.75	Bottom of hollow, 150 ft. below ridge, course S. E. Ascend.
80.20	The cor. of secs. 10-11-14 and 15. Land mountainous. Soil gravelly; 3rd. rate. Timber cedar and pinon pine. Undergrowth sage and oak brush. Good grass for grazing. Mountainous land, or land covered with dense undergrowth 80.20 chs.

SUBDIVISION OF T.13 S.R.14 E.-CONTINUED.

CHAINS.	N. $0^{\circ}01'$ W. bet. secs. 10 and 11
	Over mountainous land, through dense undergrowth.
	Descend.
5.55	Creek 3 lks. wide 2 ins. deep, 100 ft. below sec. cor. in hollow, course E.
	Ascend.
40.00	Set a sandstone $24 \times 12 \times 4$ ins. 18 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor.
	Pits impracticable.
60.00	Top of divide ridge between Dry Canon and canon on N. 500 ft. above hollow, bears N. 80° E. and S. 80° W.
	Descend.
80.00	Set a sandstone $18 \times 12 \times 4$ ins. 12 ins. in the ground, for cor. of secs. 2-3-10 and 11, marked with 5 notches on S. and 2 notches on E. edges, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
	Land mountainous.
	Soil gravelly; 3rd. rate.
	No timber.
	Undergrowth sage, oak and deer brush.
	Good grass for grazing.
	Mountainous land or land covered with dense undergrowth 80.00 chs.
	Aug. 3: At this cor. I set off $15^{\circ}59'$ N. on the decl. arc and at 0 h. 3 m. p. m. l. m. t. observe the sun on the meridian; the resulting lat. is $39^{\circ}42'$ N.

	E. on a random line bet. secs. 2 and 11
40.00	Set temp. $\frac{1}{2}$ sec. cor.
80.14	Intersect N. and S. line 17 lks. S. of the cor. of secs. 1-2-11 and 12, thence I run
	S. $89^{\circ}53'$ W. on a true line bet. secs. 2 and 11

SUBDIVISION OF T. 13 S. R. 14 E. -CONTINUED.

CHAINS. Over mountainous land through dense undergrowth.
Descend.

35.00 Bottom of hollow 60 ft. below sec. cor., course N. 70°
E.; ascend.

40.07 Set a limestone 30x12x4 ins. 22 ins. in the ground for
 $\frac{1}{2}$ sec. cor, marked $\frac{1}{2}$ on N. face, raise a mound of stone
2 ft. base $1\frac{1}{2}$ ft. high N. of cor.
Pits impracticable.

50.00 Top of ridge 50 ft. above hollow bears N. 50° E. and
S. 50° W. Descend.

60.00 Bottom of hollow 100 ft. below ridge course N. E.
Ascend.

80.14 Cor. of secs. 2-3-10 and 11.
Land mountainous.
Soil gravelly; 3rd. rate.
No timber.
Undergrowth oak, sage and deer brush.
Mountainous land or land covered with dense under-
growth 80.14 chs.

N. 0° 01' W. on a random line bet. secs. 2 and 3

39.64 Intersect N. Bay. of Tp. 4 lks. E. of the cor. of secs.
2-3-34 and 35, heretofore described. Thence I run
S. 0° 04' E. on a true line bet. secs. 2 and 3
Over mountainous land through dense undergrowth.
Descend.

10.50 Bottom of hollow 250 ft. below sec. cor., course N. E.
Ascend.

35.00 Top of ridge 200 ft. above hollow, bears N. E. and S. W.
Descend.

39.64 Cor of secs. 2-3-10 and 11.
Land mountainous.
Soil gravelly 3rd. rate.

SUBDIVISION OF T. 13 S. R. 14 E. - CONTINUED.

CHAINS. No timber.

Undergrowth oak, sage, mahogany and deer brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth 39.64 chs.

Aug. 9, 1902.

Aug 10, 1902: At 7 h. 0 m. a. m. l. m. t. I set off $39^{\circ}38'$ N. on the lat. arc; $15^{\circ}46'$ N. on the decl. arc, and determine a true meridian with the solar at the cor. of secs. 3-4-33 and 34, on S. bdy. of Tp. heretofore described. Thence I run

N. $0^{\circ}02'$ W. bet. secs. 33 and 34

Over mountainous land through heavy timber.

Descend.

22.50 Bottom of hollow 100 ft. below sec. cor., course N. 20° E.; ascend.

40.00 Set a sandstone 24x16x4 ins. 18 ins. in the ground for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face, from which
A pine 7 ins. diam. bears N. 60° E. 23 lks. dist. marked $\frac{1}{2}$ S. 34 B. T.

A pine 12 ins. diam. bears S. 60° W. 14 lks. dist., marked $\frac{1}{2}$ S. 33 B. T.

41.75 Top of ridge 80 ft. above hollow, bears N. 30° E. and S. 30° W.

55.50 Bottom of hollow, 400 ft. below ridge, course N. 60° E.
Ascend.

65.00 Top of ridge 50 ft. above hollow bears N. and W.
Descend.

80.00 Set a sandstone 28x12x4 ins. 21 ins. in the ground, for cor. of secs. 27-28-33 and 34, marked with 1 notch on S. and 3 notches on E. edges, from which

An aspen 4 ins. diam. bears N. 27° E. 52 lks. dist. marked T. 13 S. R. 14 E. S. 27 B. T.

SUBDIVISION OF T. 13 S. R. 14 E. -CONTINUED.

CHAINS.	An aspen 5 ins. diam. bears S. 53° E. 45 lks. dist. marked T. 13 S. R. 14 E. S. 34 B. T.
	An aspen 4 ins. diam. bears S. 34° W. 26 lks. dist. marked T. 13 S. R. 14 E. S. 33 B. T.
	An aspen 6 ins. diam. bears N. 34° W. 37 lks. dist. marked T. 13 S. R. 14 E. S. 28 B. T.
	Land mountainous.
	Soil loam, and gravelly; 1st. and 3rd. rates.
	Timber pine and aspen.
	Good grass for grazing.
	Mountainous land or heavily timbered land 80.00 chs.
	S. 89° 50' E. on a random line bet. secs. 27 and 34
40.00	Set temp. $\frac{1}{2}$ sec. cor.
80.20	Intersect W. and S. line at the cor. of secs. 26-27-34 and 35. Thence I run
	N. 89° 50' W. on a true line bet. secs. 27 and 34
	Over mountainous land, through heavy timber.
	Ascend.
25.50	Top of ridge 300 ft. above sec. cor. bears N. 30° E. and S. 30° W.
	Descend.
40.10	Set a sandstone 20x18x4 ins. 15 ins. in the ground for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face, from which
	A pine 4 ins. diam. bears N. 30° E. 85 lks. dist., marked $\frac{1}{2}$ S. 27 B. T.
	A pine 5 ins. diam. bears S. 12 lks. dist., marked $\frac{1}{2}$ S. 34 B. T.
42.00	Bottom of hollow, 200 ft. below ridge, course N. W.
	Ascend.
56.00	Top of ridge 50 ft. above hollow, bears N. W. and S. E.
	Descend.
65.00	Perpendicular ledge 20 ft. high bears N. and S.

SUBDIVISION OF T. 13 S. R. 14 E. - CONTINUED.

CHAINS.

- 79.50 Creek 5 lks. wide 6 ins. deep, in bottom of canon 300 ft. below ridge, course N. 30° E.
Ascend.
- 80.20 The cor. of secs. 27-28-33 and 34.
Land mountainous.
Soil gravelly loam and rocky; 2nd. and 4th. rates.
Timber pine and aspen.
Good grass for grazing.
Mountainous or heavily timbered land 80.20 chs.
-
- N. 0° 02' W. bet. secs. 27 and 28
- Over mountainous land, through heavy timber; descend.
- 2.50 Creek 5 lks. 6 ins. deep, in bottom of canon 50 ft. below sec. cor., course N. 20° W.
Thence along E. side of canon.
- 3.50 Same creek, 5 lks. wide 3 ins. deep, course N. E.
Ascend.
- 23.50 Top of ridge 60 ft. above canon, bears E. and W.
Descend.
- 32.50 Bottom of hollow 30 ft. below ridge, course E.
Ascend.
- 35.00 Leave timber bears E. and W.
Enter dense undergrowth.
- 40.00 Set a limestone 24x10x4 ins. 18 ins. in the ground for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor.
Pits impracticable.
- 54.50 Top of ridge 600 ft. above hollow, bears N. 40° E. and S. 40° W.; descend.
- 62.50 Enter heavy timber bears E. and W.
- 68.00 Top of perpendicular ledge 25 ft. high bears N. E. and S. W.
- 80.00 Set a sandstone 24x20x4 ins. 18 ins. in the ground, for cor. of secs. 21-22-27 and 28, marked with 2 notch-

SUBDIVISION OF T. 13 S. R. 14 E. - CONTINUED.

CHAINS.

es on S. and 3 notches on E. edges, from which

A pine 7 ins. diam. bears S. 50° E. 70 lks. dist.
marked T. 13 S. R. 14 E. S. 27 B. T.

A pine 7 ins. diam. bears N. 10° W. 21 lks. dist.
marked T. 13 S. R. 14 E. S. 21 B. T.

No other trees within limits, and raise a mound of
stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor.

Pits impracticable.

Land mountainous.

Soil black loam and gravelly; 1st. and 3rd. rates.

Timber pine and aspen.

Undergrowth sagebrush.

Good grass for grazing.

Mountainous or heavily timbered land 80.00 chs.

Aug. 10, 1902: At the noon hour the sky is overcast and
solar observation is impossible.

S. $89^{\circ}50'$ E. on a random line bet. secs. 22 and 27

40.00 Set temp. $\frac{1}{2}$ sec. cor.

80.28 Intersect N. and S. line 27 lks. S. of the cor. of secs.
22-23-26 and 27. Thence I run

S. $89^{\circ}58'$ W. on a true line bet. secs. 22 and 27

Over mountainous land through scattering timber
and scattering undergrowth.

Descend.

18.50 Creek 15 lks. wide 6 ins. deep, in bottom of Dry Canon,
300 ft. below sec. cor., course N.

Ascend.

40.14 Set a sandstone $16 \times 10 \times 4$ ins. 11 ins. in the ground
for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face, from which

An aspen 5 ins. diam. bears N. 51° W. 21 lks. dist.
marked $\frac{1}{2}$ S. 22 B. T.

An aspen 5 ins. diam. bears S. 26° E. 30 lks. dist.
marked $\frac{1}{2}$ S. 27 B. T.

SUBDIVISION OF T. 13 S. R. 14 E. -CONTINUED.

CHAINS.

64.50 Top of ridge 700 ft. above canon, bears N. 10° E. and S. 10° W. Descend.

72.50 Bottom of hollow 110 ft. below ridge course N. W. Ascend.

78.00 Top of ridge 20 ft. above hollow, bears N. and S. Descend.

80.28 Cor. of secs. 21-22-27 and 28.

Land mountainous.

Soil gravelly; 3rd. rate.

Timber aspen.

Undergrowth oak and sagebrush.

Good grass for grazing.

Mountainous land 80.28 chs.

N. 0° 02' W. bet. secs. 21 and 22.

Over mountainous land, through dense undergrowth and scattering timber.

Descend.

19.50 Creek 3 lks. wide 2 ins. deep, bottom of branch in Dry Canon, 350 ft. below sec. cor., course N. E. Ascend.

25.00 Top of spur 20 ft. above canon, bears N. and W. Descend.

33.50 Bottom of hollow 30 ft. below ridge, course E. Ascend.

34.50 Leave timber, bears E. and W.

40.00 Set a sandstone 18x10x4 ins. 12 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face, and raise a mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high W. of cor.

Pits impracticable.

43.50 Top of spur, 100 ft. above hollow, bears E. and W. Descend.

SUBDIVISION OF T. 13 S. R. 14 E. -CONTINUED.

CHAINS.

44.00 Enter scattering timber, bears E. and W.

55.00 Small spring bears E. 5 lks. dist., stream from which flows S. 60° E.

55.35 Bottom of hollow 150 ft. below ridge, course S. 60° E.

55.75 Leave timber, bears E. and W.

67.50 Top of spur 200 ft. above hollow, bears N. W. and S. E.

72.00 Bottom of hollow, 100 ft. below spur, course E.
Ascend.

80.00 Top of ridge 50 ft. above hollow, bears N. E. and S. W.
Set a sandstone 28x8x4 ins. 21 ins. in the ground for cor. of secs. 15-16-21 and 22, marked 13 S. on N. E., 14 E. on S. E. faces, with 3 notches on S. and 3 notches on E. edges, and raise a mound of stone, 2 ft. base 1½ ft. high W. of cor. Pits impracticable.
August 10, 1902: At this cor. I set off 39° 41' N. on the lat. arc 15° 39' N. on the decl. arc, and at 5 h. 0 m. p. m. l. m. t. determine a true meridian with the solar and mark a point thereof on a stone firmly set in the ground 5.00 chs. N. of the cor.
At 10 h. 13 m. p. m. l. m. t. I observe Polaris at eastern elongation, in accordance with the Manual, and mark a point in the line thus determined by a tack driven in a wooden plug set in the ground E. of the stone already set 5.00 chs. N. of the corner.
Land mountainous.
Soil gravelly-loam and rocky; 2nd. and 4th. rates.
Timber aspen.
Undergrowth oak and sagebrush.
Good grass for grazing.
Mountainous land or land covered with dense undergrowth on 80.00 chs. August 10, 1902.

SUBDIVISION OF T. 13 S. R. 14 E. -CONTINUED.

CHAINS. August 11, 1902: At 6 h. 30 m. a. m. l. m. t. I lay off the azimuth of Polaris $1^{\circ}35'$ to the west, and mark a point in the true meridian, thus determined, by cutting a small groove in the stone already set 5.00 chs. N. of the corner; this mark falls .28 ins. E. of the true meridian determined by the solar.

At 7 h. 02 m. a. m. l. m. t. I set off $39^{\circ}41'$ W. on the lat. arc, $15^{\circ}29'$ N. on the decl. arc, and mark a point in the true meridian determined by the solar, by a cross on the stone already set 5.00 chs. N. of the corner; this mark falls .32 ins. E. of the true meridian determined by Polaris observation.

The solar apparatus by p. m. and a. m. observations defines positions for true meridians, respectively, about $0'15''$ west and $0'17''$ E. of the true meridian determined by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 7 h. 30 m. a. m. is $16^{\circ}18'$ W.; the angle thus determined, reduced by the table page 100 of the Manual, gives the mean mag. decl. $16^{\circ}14'$ E. Thence I run

N. $89^{\circ}58'$ E. on a random line bet. secs. 15 and 22

40.00 Set temp. $\frac{1}{2}$ sec. cor.

80.20 Intersect W. and S. line 23 lks. of the cor. of secs. 14-15-22 and 23, thence I run

S. $89^{\circ}48'$ W. on a true line bet. secs. 15 and 22

Over mountainous land, through scattering timber and dense undergrowth; ascend.

1.00 Top of ridge 10 ft. above sec cor. bears N. 20° W. and S. 20° E.

Descend.

12.50 Foot of descent 200 ft. below ridge, bears N. 20° E. and S. 30° W.

SUBDIVISION OF T. 13 S. R. 14 E. - CONTINUED.

CHAINS.	Enter bottom of Dry Canon,
15.00	Wash 40 lks. wide 6 ft. deep, in canon, course N. 30° E.
21.00	Leave canon, bears N. 30° E. and S. 30° W. Ascend.
35.00	Top of ridge 200 ft. above canon, bears N. and S. Descend.
40.10	Set a sandstone 16x10x5 ins. 11 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face, from which An aspen 6 ins. diam. bears N. 60° E. 64 lks. dist. marked $\frac{1}{2}$ S. 15 B.T. An aspen 5 ins. diam. bears S. 60° W. 120 lks. dist. marked $\frac{1}{2}$ S. 22 B.T.
43.00	Bottom of hollow, 100 ft. below ridge, course N. E. Ascend.
70.00	Enter heavy timber bears N. and S.
75.00	Leave timber bears N. and S.
80.20	The cor. of secs. 15-18-21 and 22. Land mountainous. Soil black loam and gravelly; 1st. and 3rd. rate. Timber aspen. Undergrowth deer, oak and service berry brush. Good grass for grazing. Mountainous land or land covered with dense under- growth 80.20 chs.
	N. 0° 02' W. bet. secs. 15 and 16
	Over mountainous land, through scattering timber and dense undergrowth. Descend.
19.25	Creek 3 lks. wide 2 ins. deep, in bottom of branch of Dry Canon, 800 ft. below sec. cor., course W. Ascend.
40.00	Set a sandstone 18x12x4 ins. 12 ins. in the ground for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face, from which

SUBDIVISION OF T. 13 S. R. 14 E. -CONTINUED.

CHAINS.	A pinon pine 12 ins. diam. bears E. 100 lks. dist. marked $\frac{1}{2}$ S. 15 B.T.
	No other tree within limits, raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor.
	Pits impracticable.
58.00	Top of ascent 700 ft. above canon, bears N. 80° W. and S. 80° E. Thence across rolling mesa.
	Enter heavy timber,
70.00	Leave heavy timber, and enter dense undergrowth bears E. and W.
80.00	Set a sandstone 24x13x4 ins. 13 ins. in the ground for cor. of secs. 9-10-15 and 16, marked with 4 notches on S. and 3 notches on E. edges, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor.
	Pits impracticable.
	Land mountainous and rolling mesa.
	Soil sandy and gravelly-loam 2nd. rate.
	Timber pine and aspen.
	Undergrowth sage and deer brush.
	Good grass for grazing.
	Mountainous, or heavily timbered land, or land covered with dense undergrowth 80.00 chs.
	<hr style="width: 20%; margin: 0 auto;"/> $N. 89^{\circ} 48' E.$ on a random line bet. secs. 10 and 15
40.00	Set temp. $\frac{1}{2}$ sec. cor.
80.24	Intersect W. and S. line at the cor. of secs. 10-11-14 and 15. Thence I run
	$S. 89^{\circ} 48' W.$ on a true line bet. secs. 10 and 15
	Over mountainous land, through dense undergrowth and scattering timber; descend.
9.60	Bottom of hollow 160 ft. below sec. cor., course N. 60° E.; ascend.
10.00	Leave timber, bears N. and S.

SUBDIVISION OF T. 13 S. R. 14 E. -CONTINUED.

CHAINS.	
33.50	Top of ascent, 300 ft. above hollow, bears N. and S. Thence over rolling mesa. Through heavy timber.
40.12	Set a sandstone 18x10x4 ins. 11 ins. in the ground for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face, from which An aspen 4 ins. diam. bears N. 23° E. 70 lks. dist. marked $\frac{1}{2}$ S. 10 B.T. An aspen 4 ins. diam. bears S. 22° E. 60 lks. dist. marked $\frac{1}{2}$ S. 15 B.T.
51.00	Leave heavy timber; enter scattering timber, bears N. and S.
80.24	The cor. of secs. 9-10-15 and 16. Land mountainous and rolling mesa. Soil gravelly-loam and rocky; 2nd. and 4th. rates. Timber aspen. Undergrowth oak and deer brush. Good grass for grazing. Mountainous, or heavily timbered land, or land covered with dense undergrowth 80.24 chs. Aug. 11, 1902: At this cor. I set off 15° 24' N. on the decl. arc, and at 6 h. 02 m. p. m. l. m. t., observe the sun on the meridian; the resulting lat. is 39° 42' N.
	N. 0° 02' W. bet. secs. 9 and 10
	Over rolling mesa, through dense undergrowth and scattering timber.
40.00	Set a sandstone 10x8x7 ins. 11 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face, from which An aspen 5 ins. diam. bears S. 45° E. 43 lks. dist. marked $\frac{1}{2}$ S. 10 B.T. An aspen 5 ins. diam. bears S. 48° W. 15 lks. dist. marked $\frac{1}{2}$ S. 9 B.T.
44.00	Leave timber, bears E. and W.
60.00	Enter dense aspen saplings, bear E. and W.

SUBDIVISION OF T113 S. R14 E. -CONTINUED.

CHAINS.

- 60.25 Leave mesa, bears N. E. and S. W.
Descend.
- 72.20 Bottom of branch of ~~Stone Cabin~~ Canon 115 ft. below
mesa, course N. E.; ascend.
- 80.00 Set a sandstone 20x8x8 ins. 15 ins. in the ground for
cor. of secs. 3-4-9 and 10, marked with 5 notches on
S. and 3 notches on E. edges, and raise a mound of
stone 2 ft. base 1½ ft. high W. of cor.
Pits impracticable.
Land mountainous, and rolling mesa.
Soil sandy loam, 2nd. rate.
Timber aspen.
Undergrowth sage and deer brush.
Good grass for grazing.
Mountainous or heavily timbered land, or land cover-
ed with dense undergrowth 80.00 chs.
-
- N. 89° 43' E. on a random line bet. secs. 3 and 10
- 40.00 Set temp. ½ sec. cor.
- 80.26 Intersect W. and S. line 14 lks. N. of the cor. of secs.
2-3-10 and 11. Thence I run
S. 89° 54' W. on a true line bet. secs. 3 and 10
Over mountainous land, through scattering aspen sap-
lings; ascend.
- 4.00 Top of ridge 20 ft. above sec. cor. bears N. E. and S. W.
Descend.
- 22.00 Bottom of hollow, 100 ft. below ridge, course N. E.
Ascend.
- 22.50 Leave aspen saplings, and enter scattering aspen tim-
ber, bears E. and W.
- 25.00 Top of ridge 100 ft. above hollow, bears N. 30° E. and
S. 30° W.

SUBDIVISION OF T. 13 S. R. 14 E. - CONTINUED.

CHAINS.	Descend.
40.13	Bottom of hollow 50 ft. below ridge, course N.E. Set a sandstone 15x8x5 ins. 11 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face, from which, An aspen 4 ins. diam. bears N. 30° E. 20 lks. dist. marked $\frac{1}{2}$ S. 3 B.T. An aspen 4 ins. diam. bears S. 60° E. 30 lks. dist. marked $\frac{1}{2}$ S. 10 B.T. Ascend.
45.00	Top of ridge 150 ft. above hollow bears N.E. and S.W. Descend.
66.25	Bottom of hollow, 100 ft. below ridge, course N. Ascend.
69.50	Top of spur 50 ft. above hollow, bears N. and S. Descend.
70.50	Bottom of branch of <i>Stone Cabin</i> Canon, 150 ft. below ridge, course N.E. Ascend.
80.26	The cor. of secs. 3-4-9 and 10. Land mountainous. Soil gravelly, 3rd. rate. Timber aspen. Undergrowth aspen saplings, and deer brush. Good grass for grazing. Mountainous land, or land covered with dense under- growth 80.26 chs.
	N. 0° 02' W. on a random line Bet. secs. 3 and 4.
39.70	Intersect N. Bdy. of Tp. 2 lks. E. of the cor. of secs. 3- 4-33 and 34, heretofore described. Thence I run S. 0° 04' E. on a true line bet. secs. 3 and 4 Over mountainous land, through dense undergrowth.

SUBDIVISION OF T. 13 S. R. 14 E. -CONTINUED.

CHAINS. Ascend.

25.00 Top of ridge 200 ft. above sec. cor., bears N. E. and S. W.; descend.

39.70 The cor. of secs. 3-4-9 and 10.
Land mountainous.
Soil gravelly; 3rd. rate.
No timber.
Undergrowth oak and deer brush.
Good grass for grazing.
Mountainous land, or land covered with dense undergrowth 39.70 chs. Aug. 11, 1902.

Aug. 12, 1902, at 7 h. 0 m. a. m. l. n. t., I set off $39^{\circ}38'$ N. on the lat. arc, $15^{\circ}11'$ N. on the decl. arc, and determine a true meridian with the solar at the cor. of secs. 4-5-32 and 33, on S. bdy. of Tp., heretofore described. Thence I run

N. $0^{\circ}03'$ W. bet. secs. 32 and 33

Over mountainous land, through aspen saplings.

Descend.

1.75 Bottom of hollow, 30 ft. below sec. cor., course N. 60° W.

Ascend.

9.00 Top of ridge 75 ft. above hollow, bears N. E. and S. W.

18.25 Bottom of branch of Whitmore Canon 125 ft. below ridge, course S. 35° W.

A creek 1 lk. wide, 1 ins. deep, in bottom.

Ascend.

30.00 Enter scattering timber bears E. and W.

40.00 Set a sandstone $18 \times 10 \times 4$ ins. 12 ins. in the ground for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face, from which

An aspen 5 ins. diam. bears S. 60° E. 8 lks. dist., marked $\frac{1}{2}$ S. 33 B. T.

A pinon pine 6 ins. diam. bears S. 35° W. 65 lks. dist., marked $\frac{1}{2}$ S. 32 B. T.

SUBDIVISION OF T. 13 S. R. 14 E. - CONTINUED.

CHAINS.

47.25 Top of ridge 500 ft. above canon, bears N. E. and S. W.
Descend.

55.00 Bottom of hollow 200 ft. below ridge, course S. 50° W.
Ascend.

64.00 Top of ridge, 200 ft. above hollow, bears N. 60° E. and
S. 60° W.; descend.

72.00 Bottom of hollow 150 ft. below ridge, course W.
Ascend.

80.00 Set a sandstone 18x9x7 ins. 12 ins. in the ground for
cor. of secs. 28-29-32 and 33, marked with 1 notch on
S. and 4 notches on E. edges, from which

A pine 6 ins. diam. bears N. 15° E. 65 lks. dist.,
marked T. 13 S. R. 14 E. S. 28 B. T.

A red pine 14 ins. diam. bears S. 35° E. 35 lks.
dist., marked T. 13 S. R. 14 E. S. 33 B. T.

A red pine 10 ins. diam. bears S. 20° W. 100 lks. i
dist., marked T. 13 S. R. 14 E. S. 32 B. T.

A white pine 5 ins. diam. bears N. 60° W. 25 lks.
dist., marked T. 13 S. R. 14 E. S. 29 B. T.

Land mountainous.
Soil rocky 4th. rate.
Timber pine and aspen.
Undergrowth deer brush.
Good grass for grazing.
Mountainous land, or land covered with dense under-
growth 80.00 chs.

S. 89° 54' E. on a random line bet. secs.

28 and 33.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.00 Intersect N. and S. line 24 lks. S. of cor. of secs. 27-
28-33 and 34. Thence I run

S. 89° 56' W. on a true line bet. secs. 28 and 33

SUBDIVISIONS OF T. 13 S. T. 14 E. - CONTINUED.

CHAINS.	Over mountainous land, through scattering timber. Ascend.
40.00	Set a sandstone 18x16x5 ins. 12 ins. in the ground for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face, from which A pine 6 ins. diam. bears N. 20° E. 15 lks. dist. marked $\frac{1}{2}$ S. 38 B.T. A pine 4 ins. diam. bears S. 25° E. 80 lks. dist. marked $\frac{1}{2}$ S. 33 B.T.
49.00	Top of ridge 150 ft. above hollow, bears N. E. and S. W. Descend.
51.00	Enter heavy timber, bears N. and S.
59.00	Leave timber, bears N. and S.
60.60	Bottom of hollow 150 ft. below ridge, course N. 30° W. Ascend.
73.00	Top of divide ridge, between Whitmore and Dry Canons 200 ft. above hollow, bears N. W. and S. E. Descend.
80.00	Cor. of secs. 28-29-32 and 33. Land mountainous. Soil black loam; 1st. rate. Timber pine and aspen. Undergrowth deer brush. Good grass for grazing. Mountainous, or heavily timbered land 80.00 chs.
	N. 0° 03' W. bet. secs. 28 and 29
	Over mountainous land, through scattering timber. Ascend.
11.30	Top of divide ridge, bet. Whitmore and Dry Canons, bears N. 40° W. and S. 40° E. Descend.
19.50	Bottom of hollow 65 ft. below ridge course N. E. Ascend.

SUBDIVISION OF T. 13 S. R. 14 E. - CONTINUED.

CHAINS.

- 28.00 Top of ridge 50 ft. above hollow, bears N. 80° E. and S. 80° W.
Descend.
- 40.00 Set a sandstone 12x10x4 ins. 11 ins. in the ground for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face, from which
A pine 8 ins. diam. bears S. 50° E. 35 lks. dist. marked $\frac{1}{2}$ S. 28 B.T.
A pine 7 ins. diam. bears N. 70° W. 55 lks. dist. marked $\frac{1}{2}$ S. 29 B.T.
- 59.50 Bottom of hollow 200 ft. below ridge, course N. E.
Ascend.
- 65.00 Top of ridge 60 ft. above hollow, bears N. E. and S. W.
- 73.00 Bottom of hollow 80 ft. below ridge, course N. 60° E.
A spring of good water, S. 60° W. about 7 chs. dist.
- 80.00 Set a sandstone 18x10x6 ins. 12 ins. in the ground for cor. of secs. 20-21 28 and 29, marked with 2 notches on S. and 4 notches on E. edges; from which,
A red pine 4 ins. diam. bears N. 5° E. 140 lks. dist. marked T. 13 S. R. 14 E. S. 21 B.T.
A red pine 11 ins. diam. bears S. 66° E. 70 lks. dist., marked T. 13 S. R. 14 E. S. 28 B.T.
A red pine 6 ins. diam. bears S. 81° W. 78 lks. dist. marked T. 13 S. R. 14 E. S. 29 B.T.
A red pine 6 ins. diam. bears N. 31° W. 150 lks. dist., marked T. 13 S. R. 14 E. S. 20 B.T.
- Land mountainous.
Soil black loam, 1st. rate.
Timber pine and aspen.
Undergrowth deer brush.
Mountainous land 80.00 chs.
Aug 12, 1902: At noon hour the sky is overcast and solar observation is impossible.

SUBDIVISION OF T. 13 S. R. 14 E. -CONTINUED.

CHAINS.	N. $89^{\circ}56'$ E. on a random line bet. secs. 21 and 28
40.00	Set temp. $\frac{1}{2}$ sec. cor.
79.90	Intersect N. and S. line at the cor. of secs. 21-22-27 and 28. Thence I run S. $89^{\circ}56'$ W. on a true line bet. secs. 21 and 28 Over mountainous land, through scattering timber. Descend.
8.75	Bottom of hollow 125 ft. below sec. cor., course N.W. Ascend.
10.50	Top of ridge 50 ft. above hollow bears N.W. and S.E. Descend.
17.75	Creek 3 lks. wide 3 ins. deep, in bottom of branch of Dry Canon, 200 ft. below ridge, course N.W.; ascend.
27.50	Top of ridge 130 ft. above canon, bears N.W. and S.E. Descend.
33.00	Bottom of hollow 100 ft. below ridge, course S.E. Ascend.
39.95	Set a sandstone 20x10x5 ins. 15 ins. in the ground for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face, from which A pine 4 ins. diam. bears N. 10° W. 10 lks. dist. marked $\frac{1}{2}$ S. 21 B.T. A pine 5 ins. diam. bears S. 45° E. 35 lks. dist. marked $\frac{1}{2}$ S. 28 B.T.
66.00	Top of ridge 500 ft. above hollow bears N. 60° W. and S. 60° E.; descend.
79.900	Corner of secs. 20-21-28 and 29. Land mountainous. Soil black loam; 1st. rate. Timber pine and aspen. Good grass for grazing. Mountainous land 79.90 chs.
	N. $0^{\circ}03'$ W. bet. secs. 20 and 21 Over mountainous land, through scattering timber and

SUBDIVISION OF T.13 S.R.14 E.-CONTINUED.

- CHAINS. scattering undergrowth.
- Ascend.
- 8.00 Top of ridge 200 ft. above sec. cor. bears N. 80° W. and S. 80° E.; descend.
- 14.80 Bottom of hollow 50 ft. below ridge, course N. 30° E.
- 40.00 Set a sandstone 18x12x8 ins. 12 ins. in the ground for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face, from which
- An aspen 7 ins. diam. bears E. 45 lks. dist., marked $\frac{1}{2}$ S. 21 B. T.
- An aspen 5 ins. diam. bears W. 50 lks. dist., marked $\frac{1}{2}$ S. 20 B. T.
- 52.00 Top of ridge, 300 ft. above hollow, bears N. 60° E. and S. 60° W.
- 62.00 Creek 1 lk. wide, 1 in. deep, in bottom of hollow, 300 ft. below ridge, course N. 60° E. A spring bears S. 60° W. about 18.00 chs. dist; Ascend.
- 80.00 Set a sandstone 20x8x6 ins. 15 ins. in the ground, for cor of secs. 16-17-20 and 21, marked with 3 notches on S. and 4 notches on E. edges, from which
- An aspen 5 ins. diam. bears N. 55° E. 62 lks. dist. marked T. 13 S. R. 14 E. S. 16 B. T.
- An aspen 5 ins. diam. bears S. 38° E. 30 lks. dist. marked T. 13 S. R. 14 E. S. 21 B. T.
- An aspen 4 ins. diam. bears S. 72° W. 110 lks. dist. marked T. 13 S. R. 14 E. S. 20 B. T.
- An aspen 4 ins. diam. bears N. 70° W. 70 lks. dist. marked T. 13 S. R. 14 E. S. 17 B. T.
- Lana mountainous.
- Soil black loam; 1st. rate.
- Timber pine and aspen.
- Good grass for grazing.
- Mountainous land 80.00 chs.

N. 83° 56' E. on a random line bet. secs. 16 and 21

- 40.00 Set temp. $\frac{1}{2}$ sec. cor.

SUBDIVISION OF T.13 S.R.14 E.-CONTINUED.

CHAINS.

- 80.00 Intersect N. and S. line 5. lks. S. of the cor. of secs. 15-16-21 and 22, Thence I run
S. $89^{\circ}54'$ W. on a true line bet. secs. 16 and 21
Over mountainous land, through dense undergrowth.
Descend.
- 12.00 Enter heavy timber bears N. and S.
- 13.00 Leave timber, bears N. and S.
- 32.60 Bottom of hollow 85 ft. below sec. cor., course N. 30° E.
Ascend.
- 40.00 Top of ridge 85 ft above hollow bears N. and S.
Set a sandstone $18 \times 12 \times 4$ ins. 12 ins. in the ground
for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face, and raise a
mound of stone 2 ft. base $1\frac{1}{2}$ ft. high N. of cor.
Pits impracticable. Descend.
- 56.00 Bottom of hollow 200 ft. below ridge, course N. 30° E.
Ascend.
- 80.00 The cor. of secs. 16-17-20 and 21.
Land mountainous.
Soil gravelly, 3rd. rate.
Timber pine and aspen.
Undergrowth oak and sagebrush.
Good grass for grazing.
Mountainous land, or timbered land, or land covered
with dense undergrowth 80.00 chs.
- Aug 12, 1902.
- Aug 13, 1902, at 7 h. 0 m. a. m. l. m. t. I set off $39^{\circ}41'$ N.
on the lat. arc, $14^{\circ}53'$ N. on the decl. arc, and deter-
mine a true meridian with the solar at the cor. of
secs. 16-17-20 and 21. Thence I run
N. $0^{\circ}03'$ W. bet. secs. 16 and 17
Over mountainous land, through dense undergrowth.
Descend.
- 3.50 Bottom of hollow, 60 ft. below sec. cor., course N. 80° E.

SUBDIVISION OF T.13 S.R.14 E.-CONTINUED.

CHAINS.

Ascend.

4.50 Top of spur 25 ft. above hollow, bears E. and W.

Descend.

5.65 Bottom of hollow, 20 ft. below spur, course E.

Ascend.

Spring bears E. about 5 chs. dist.

40.00 Set a sandstone 24x10x8 ins. 18 ins. in the ground for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable.

48.00 Top of ascent 700 ft. above canon, bears N. 80° E. and S. 80° W.

Thence over rolling mesa.

Enter heavy aspen timber, bears N. 80° E. and S. 80° W.

80.00 Set a sandstone 16x8x4 ins. 11 ins. in the ground, for cor. of secs. 8-9-16 and 17, marked with 4 notches on S. and 4 notches on E. edges, from which

An aspen 5 ins. diam. bears N. 53° E. 85 lks. dist.
marked T.13 S.R.14 E.S.9 B.T.

An aspen 10 ins. diam. bears S. 38° E. 75 lks. dist.
marked T.13 S.R.14 E.S.16 B.T.

An aspen 10 ins. diam. bears S. 59° W. 70 lks. dist.
marked T.13 S.R.14 E.S.17 B.T.

An aspen 8 ins. diam. bears N. 18° W. 45 lks. dist.
marked T.13 S.R.14 E.S.8 B.T.

Land mountainous and rolling mesa.

Soil gravelly 3rd. rate.

Timber aspen.

Undergrowth sage and deer brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth 80.00 chs.

SUBDIVISION OF T. 13 S. R. 14 E. - CONTINUED.

CHAINS.

- N. $89^{\circ}54'E$. on a random line bet. secs. 9 and 16
- 40.00 Set temp. $\frac{1}{2}$ sec. cor.
- 80.00 Intersect N. and S. line 14 lks. N. of the cor. of secs. 9-10-15 and 16. Thence I run
- W. on a true line bet. secs. 9 and 16
- Over rolling mesa, through scattering timber and dense undergrowth.
- 40.00 Set a limestone $30 \times 12 \times 4$ ins. 22 ins. in the ground for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face, from which
- A pinon pine 6 ins. diam. bears S. $80^{\circ}E$. 10 lks. dist., marked $\frac{1}{2}$ S. 16 B.T.
- No other tree within limits, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high N. of cor.
- Pits impracticable.
- 60.00 Leave mesa, bears N. $70^{\circ}W$. and S. $70^{\circ}E$.
- Descend.
- 69.00 Spring branch 2 lks. wide, 2 ins. deep, in bottom of hollow, 100 ft. below mesa, course S. $60^{\circ}E$. Ascend.
- From this point a spring bears N.W. about 25 lks. dist.
- 74.00 Top of ascent bears N. and S.
- Thence over rolling mesa.
- 80.00 Cor. of secs. 8-9-16 and 17
- Land mountainous, and rolling mesa.
- Soil gravelly loam, 2nd. rate.
- Timber pine and aspen.
- Undergrowth sage and deer brush.
- Good grass for grazing.
- Mountainous land, or land covered with dense undergrowth 80.00 chs.
-
- N. $0^{\circ}03'W$. bet. secs. 8 and 9
- Over rolling mesa, through heavy timber.
- 9.00 Leave timber and enter dense undergrowth bears N. and

SUBDIVISION OF T. 13 S. R. 14 E. CONTINUED.

CHAINS.	W.
17.00	Leave undergrowth, and enter heavy timber.
32.00	Leave timber and enter dense undergrowth.
40.00	Set a sandstone 16x8x4 ins. 11 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of corner. Pits impracticable.
47.00	Leave undergrowth, and enter heavy timber, bears N. E. and S. W.
70.00	Leave mesa, bears E. and W. Descend.
72.00	Leave timber, and enter dense undergrowth.
74.15	Bottom of hollow 100 ft. below mesa, course N. E. Ascend. This is Stone Cabin Canon.
76.00	Enter scattering aspen timber, bears E. and W.
80.00	Set a sandstone 20x12x8 ins. 15 ins. in the ground for cor. of secs. 4-5-8 and 9, marked with 5 notches on S. and 4 notches on E. edges, from which An aspen 4 ins. diam. bears N. 30° E. 50 lks. dist. marked T. 13 S. R. 14 E. S. 4 B. T. An aspen 6 ins. diam bears S. 20° E. 45 lks. dist. marked T. 13 S. R. 14 E. S. 9 B. T. An aspen 6 ins. diam. bears S. 30° W. 50 lks. dist. marked T. 13 S. R. 14 E. S. 8 B. T. An aspen 4 ins. diam. bears N. 30° W. 48 lks. dist. marked T. 13 S. R. 14 E. S. 5 B. T. Land mountainous and rolling mesa. Soil gravelly loam, and rocky; 2nd. and 4th. rates. Timber aspen. Undergrowth sage and deer brush. Good grass for grazing. Mountainous or heavily timbered land, or land cover- ed with dense undergrowth 80.00 chs. Aug 13, 1902, at the noon hour the sky is overcast, and solar observation is impossible.

SUBDIVISION OF T. 13 S. R. 14 E. - CONTINUED.

CHAINS.	East on a random line bet. secs. 4 and 9
40.00	Set temp. $\frac{1}{2}$ sec. cor.
80.12	Intersect N. and S. line 14 lks. N. of the cor. of secs. 3-4-9 and 10. Thence I run, N. $89^{\circ}54'$ W. on a true line bet. secs. 4 and 9 Over mountainous land, through dense sagebrush, and service berry. Ascend. 22.50 Top of ridge 150 ft. above sec. cor. bears N. E. and S. W. Descend. 40.06 Set a sandstone 18x14x8 ins. 12 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face, and raised a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high N. of cor. Pits impracticable. 43.00 Enter scattering aspen timber, bears N. and S. 52.00 Bottom of hollow 50 ft. below ridge, course N. 20° E. Ascend. 62.50 Top of ridge, 60 ft. above hollow, bears N. 35° E. and S. 35° W. Descend. 77.50 Bottom of Stone Cabin Canon, 130 ft. below ridge, course N. E.; ascend. 80.12 The cor. of secs. 4-5-8 and 9. Land mountainous. Soil gravelly loam, and rocky, 2nd. and 4th. rates. Timber aspen, Undergrowth oak and service berry. Good grass for grazing. Mountainous land, or land covered with dense undergrowth 80.12 chs. <hr/> N. $0^{\circ}03'$ W. on a random line bet. Secs. 4 and 5 39.88 Intersect N. bdy. of Tp. at the cor. of secs. 4-5-32 and

SUBDIVISION OF T. 13 S. R. 14 E. -CONTINUED.

CHAINS. 33. Thence I run
 S. $0^{\circ}03'$ E. on a true line bet. secs. 4 and 5
 Over mountainous land, through dense undergrowth.
 Descend.

5.50 Enter scattering aspen timber, bears E. and W.

39.88 Cor. of secs. 4-5-8 and 9.
 Land mountainous.
 Soil gravelly; 3rd. rate.
 Timber aspen.
 Undergrowth sage and deer brush.
 Good grass for grazing.
 Mountainous land, or land covered with dense under-
 growth 39.88 chs.

August 13, 1902.

(At 7 & 0 M AN-LINE) ✓
 August 14, 1902, I set off $39^{\circ}38'$ N. on the lat. arc, 14°
 $35'$ N. on the decl. arc, and determine a true meridian
 with the solar at the cor. of secs. 5-6-31 and 32, on
 S. bdy. of Tp., heretofore described.

Thence I run
 N. $0^{\circ}03'$ W. bet. secs. 31 and 32
 Over mountainous land, through dense sage and ser-
 vice berry brush. Ascend.

1.50 Foot of perpendicular ledge 15 ft. high, bears E. and
 W.

7.00 Top of ridge 60 ft. above sec. cor., bears E. and W.

7.10 Leave sage and service berry, and enter dense aspen
 saplings, bear E. and W.

12.00 Bottom of hollow 40 ft. below ridge, course E.
 Ascend.

22.00 Top of ridge 80 ft above hollow, bears E. and W.
 Descend.

32.50 Bottom of hollow 50 ft. below ridge, course E.
 Ascend.

SUBDIVISION OF T.13 S.R.14 E.-CONTINUED.

CHAINS.

- 33.25 Enter scattering aspen timber, and leave aspen saplings, bears N. 80° W. and S. 80° E.
- 40.00 Set a sandstone 24x12x4 ins. 18 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face, from which
- A mahogany 8 ins. diam. bears N. 42° E. 50 lks. dist. marked $\frac{1}{2}$ S. 32 B. T.
- A mahogany 6 ins. diam. bears S. 55° W. 41 lks. dist. marked $\frac{1}{2}$ S. 31 B. T.
- 48.00 Top of ridge 150 ft. above hollow, bears E. and W. Descend.
- 57.50 Top of perpendicular ledge, 15 ft. high bears E. and W.
- 68.75 Creek 5 lks. wide, 3 ins. deep, in bottom of canon, 300 ft. below ridge, course S. 80° E.
- A log cabin, bears N. 65° E. about 3.50 chs. dist.
- A corral bears W. 52° E. about 3.50 chs. dist.
- Ascend.
- 78.50 Top of ridge 50 ft. above canon, bears S. 60° E. and N. 60° W. Descend.
- 80.00 Set a sandstone 20x16x5 ins. 15 ins. in the ground, for cor. of secs. 29-30-31 and 32, marked with 1 notch on S. and 5 notches on E. edges, from which
- An aspen 5 ins. diam. bears N. 37° E. 102 lks. dist. marked T. 13 S. R. 14 E. S. 29 B. T.
- An aspen 4 ins. diam. bears S. 43° E. 105 lks. dist. marked T. 13 S. R. 14 E. S. 32 B. T.
- An aspen 10 ins. diam. bears S. 40° W. 12 lks. dist. marked T. 13 S. R. 14 E. S. 31 B. T..
- An aspen 5 ins. diam. bears N. 49° W. 107 lks. dist. marked T. 13 S. R. 14 E. S. 30 B. T.
- Land mountainous.
- Soil black loam, and rocky; 1st add 4th. rates.
- Timber pine and aspen.

SUBDIVISION OF T. 13 S. R. 14 E. - CONTINUED.

CHAINS.	Undergrowth sage, service berry, and aspen saplings. Good grass for grazing. Mountainous land, or land covered with dense undergrowth 80.00 chs.
	S. $89^{\circ}49'$ E. on a random line bet. secs. 29 and 32
40.00	Set temp. $\frac{1}{2}$ sec. cor.
80.18	Intersect N. and S. line 7 lks. S. of the cor. of secs. 28-29-32 and 33. Thence I run N. $89^{\circ}52'$ W. on a true line bet. secs. 29 and 32
	Over mountainous land, through scattering timber, and dense undergrowth. Descend.
40.00	Set a sandstone 24x8x4 ins. 18 ins. in the ground for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face, from which An aspen 4 ins. diam. bears S. 20 lks. dist., marked $\frac{1}{2}$ S. 32 B.T. An aspen 4 ins. diam. bears N. 15 lks. dist., marked $\frac{1}{2}$ S. 29 B.T.
63.00	Bottom of hollow 20 ft. below ridge, course S. W. Ascend.
65.50	Top of ridge 30 ft. above hollow, bears S. W. and N. E. Descend.
67.50	Creek 10 lks. wide 3 ins. deep, in bottom of Whitmore Canon, 200 ft. below ridge, course S. 20° W. Ascend.
70.20	Road leading to Sunnyside, bears N. 20° E. and S. 20° W.
70.25	Top of ridge 20 ft. above canon, bears N. and S. Descend.
71.50	Bottom of hollow 50 ft. below ridge, course S. E. Ascend.
80.18	Cor of secs. 29-30-31 and 32.

SUBDIVISION OF T. 13 S. R. 14 E. -CONTINUED.

CHAINS.

Land mountainous,
 Soil gravelly; 3rd. rate.
 Timber scattering pine and aspen.
 Undergrowth sage and deer brush.
 Good grass for grazing.
 Mountainous land, or land covered with dense under-
 growth, 80.18 chs.

N. 89° 49' W. on a random line bet. secs. 30 and 31
 40.00 Set temp. $\frac{1}{2}$ sec. cor.
 80.40 Intersect W. bdy. of Tp. 2 lks. N. of the cor. of secs.
 25-30-31 and 36, heretofore described. Thence I run,
 S. 89° 50' E. on a true line bet. secs. 30 and 31
 Over mountainous land, through dense undergrowth and
 scattering timber,; descend.
 27.50 Creek 2 lks. 3 ins. deep, in bottom of canon, 300 ft.
 below sec. cor., course S. E.; ascend.
 40.40 Set a sandstone 18x10x4 ins. 12 ins. in the ground, for
 $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face, and raise a mound of
 stone 2 ft. base $1\frac{1}{2}$ ft. high N. of cor.
 Pits impracticable.
 45.00 Top of ridge, 150 ft. above canon, bears N. W. and S. E.
 Descend.
 58.50 Bottom of hollow, 100 ft. below ridge, course S. E.
 Ascend.
 76.50 Top of ridge 40 ft. above hollow, bears N. 80° W. and
 S. 80° E.; descend.
 80.40 The cor. of secs. 29-30-31 and 32.
 Land mountainous.
 Soil black loam, and gravelly; 1st. and 3rd. rates.
 Timber aspen.
 Undergrowth aspen saplings, and sagebrush.
 Good grass for grazing.
 Mountainous land, or land covered with dense under-

SUBDIVISION OF T. 13 S. R. 14 E. -CONTINUED.

CHAINS.	growth 80.40 chs.
	August 14, 1902. The sky is overcast and solar observation is impossible.
	N. 0° 03' W. bet. secs. 29 and 30, Over mountainous land, through dense aspen saplings. Descend.
7.15	Road to Sunnyside, bears N. W. and S. E.
8.20	Bottom of hollow 50 ft. below sec. cor., course S. E.
8.25	A spring bears S. E. about 5.00 chs. dist.
	Ascend.
11.00	Leave aspen saplings; enter dense service berry and sagebrush.
27.50	Top of ridge 250 ft. above hollow, bears N. 30° E. and S. 30° E.; descend.
40.00	Set a sandstone 18x12x7 ins. 12 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face, from which an aspen 6 ins. diam. bears S. 60° E. 31 lks. dist. marked $\frac{1}{2}$ S. 29 B. T. An aspen 4 ins. diam. bears N. 68° W. 40 lks. dist. marked $\frac{1}{2}$ S. 30 B. T. Enter scattering timber, bears N. W. and S. E.
40.75	Bottom of hollow 20 ft. below ridge, course S. 60° E. Ascend.
46.50	Top of ridge, 100 ft. above hollow, bears N. 60° W. and S. 60° E.; descend.
55.00	Bottom of hollow 20 ft. below ridge, course E. Ascend.
63.50	Top of ridge 50 ft. above hollow, bears E. and W.
75.50	Bottom of hollow 200 ft. below ridge, course S. 80° E. Ascend.
80.00	Set a sandstone 24x14x8 ins. 18 ins. in the ground for cor. of secs. 19-20-29 and 30, marked with 2 notch-

SUBDIVISION OF T. 13 S. R. 14 E. - CONTINUED.

CHAINS.

es on S. and 5 notches on E. edges, from which

An aspen 4 ins. diam. bears N. 3° E. 40 lks. dist.

marked T. 13 S. R. 14 E. S. 20 B. T.

An aspen 4 ins. diam. bears S. 20° E. 100 lks. dist.

marked T. 13 S. R. 14 E. S. 29 B. T.

An aspen 4 ins. diam. bears S. 35° W. 85 lks. dist.

marked T. 13 S. R. 14 E. S. 30 B. T.

An aspen 4 ins. diam. bears N. 77° W. 46 lks. dist.

marked T. 13 S. R. 14 E. S. 19 B. T.

Land mountainous.

Soil sandy loam, and rocky; 2nd. and 4th. rates.

Timber scattering pine and aspen.

Undergrowth sage, service berry and aspen saplings.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth 80.00 chs.

S. 83° 52' E. on a random line bet. secs. 20 and 29

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.00 Intersect N. and S. line 19 lks. S. of the cor. of secs. 20-21-28 and 29. Thence I run

West on a true line bet. secs. 20 and 29

Over mountainous land, through scattering timber, and dense undergrowth; ascend.

23.25 Top of divide ridge, between Whitmore and Dry Canon 300 ft. above sec. cor., bears N. 35° W. and S. 35° E.

Trail on top of ridge.

Descend.

23.50 Top of sandstone ledge 15 ft. high, bears N. 20° E. and S. 20° W.

35.00 Bottom of hollow 20 ft. below ridge, course S. 60° W.

Ascend.

40.00 Set a sandstone 18x12x6 ins. 12 ins. in the ground,

SUBDIVISION OF T. 13 S. R. 14 E. -CONTINUED.

CHAINS.	for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face, from which A pine 10 ins. diam. bears N. 12° W. 30 lks. dist., marked $\frac{1}{2}$ S. 20 B.T. A pine 16 ins. diam. bears S. 30° E. 100 lks. dist. marked $\frac{1}{2}$ S. 29 B.T.
41.50	Top of ridge 100 ft. above hollow, bears N. 60° E. and S. 60° W.; descend.
49.50	Bottom of hollow 50 ft. below ridge, course S. W. Ascend.
52.00	Top of ridge, 20 ft. above hollow, bears N. E. and S. W. Descend.
56.20	Creek 5 lks. wide 3 ins. deep, in bottom of Whitmore Canon, 100 ft. below ridge, course S. 30° W. Ascend.
57.00	Road to Sunnyside, bears N. 30° W. and S. 30° E.
80.00	Cor. of secs. 19-20-29 and 30. Land mountainous. Soil sandy loam, and gravelly, 2nd. and 3rd. rates. Timber pine and aspen. Undergrowth, oak and deer brush. Good grass for grazing. Mountainous land, or land covered with dense under- growth 80.00 chs.

	N. 89° 50' W. on a random line bet. secs. 19 and 30
40.00	Set temp. $\frac{1}{2}$ sec. cor.
30.20	Intersect W. bdy. of Tp. 23 lks. N. of the cor. of secs. 19-24-25 and 30. Hereafter described. Thence I run E. on a true line bet. secs. 19 and 30 Over mountainous land, through heavy timber and scat- tering undergrowth. Ascend.
31.50	Top of ridge 300 ft. above sec. cor. bears N. and S. Descend.
40.20	Set a sandstone 24x12x6 ins. 18 ins. in the ground

SUBDIVISION OF T. 13 S. R. 14 E. -CONTINUED.

CHAINS.

For $\frac{1}{4}$ sec. cor., marked $\frac{1}{2}$ on N. face, from which

A pine 7 ins. diam. bears N. 68° E. 55 lks. dist.

marked $\frac{1}{2}$ S. 19 B.T.

A pine 9 ins. diam. bears S. 40° E. 20 lks. dist.

marked $\frac{1}{2}$ S. 30 B.T.

60.00 Bottom of hollow 250 ft. below ridge, course S. 80° E.
Ascend.

80.20 Cor. of secs. 19-20-29 and 30.

Land mountainous.

Soil sandy and gravelly, 3rd. rate.

Timber pine and aspen.

Undergrowth sagebrush.

Good grass for grazing.

Mountainous, or heavily timbered land 80.20 chs.

August 14, 1902.

August 15, 1902, at 7 h. 0 m. a. m. l. n. t., I set off 39°
 $40'$ N. on the lat. arc, $14^{\circ} 16'$ N. on the decl. arc, and de-
termine a true meridian with the solar at the cor.
of secs. 19-20-29 and 30. Thence I run

N. $0^{\circ} 03'$ W. bet. secs. 19 and 20.

Over mountainous land, through scattering timber and
dense undergrowth.

Ascend.

11.00 Top of ridge 100 ft. above sec. cor., bears N. 75° W. and
S. 75° E.; descend.

20.00 Enter heavy timber, bears E. and W.

32.00 Road to Sunnyside, bears N. W. and S. E.

32.50 Creek 4 lks. wide, 4 ins. deep, in bottom of Whitmore
Canon, 300 ft. below ridge, course S. E.

Ascend.

33.00 Leave heavy timber; enter scattering timber, bears E.
and W.

40.00 Set a sandstone 18x10x4 ins. 12 ins. in the ground

SUBDIVISION OF T.13 S.R.14 E.-CONTINUED.

CHAINS.	for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, and raised a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
60.00	Top of divide ridge, between Dry and Whitmore Canons 300 ft. above canon, bears N.W. and S.E. Descend.
80.00	Set a sandstone 22x11x5 ins. 16 ins. in the ground, for cor. of secs. 17-18-19 and 20, marked with 3 notches on S. and 5 notches on E. edges, from which An aspen 4 ins. diam. bears N. 60° E. 75 lks. dist. marked T. 13 S. R. 14 E. S. 17 B. T. An aspen 4 ins. diam. bears S. 17° E. 40 lks. dist. marked T. 13 S. R. 14 E. S. 20 B. T. An aspen 4 ins. diam. bears S. 53° W. 35 lks. dist. marked T. 13 S. R. 14 E. S. 19 B. T. An aspen 4 ins. diam. bears N. 16° W. 85 lks. dist. marked T. 13 S. R. 14 E. S. 18 B. T. Land mountainous. Soil gravelly 3rd. rate. Timber pine and aspen. Undergrowth sage and deer brush. Good grass for grazing. Mountainous land, or land covered with dense undergrowth 80.00 chs.
40.00	E. on a random line bet. secs. 17 and 20. Set temp. $\frac{1}{4}$ sec. cor.
80.00	Intersect N. and S. line at the cor. of secs. 16-17-20 and 21. Thence I run West on a true line bet. secs. 17 and 20 Over mountainous land, through heavy timber; ascend.
10.00	Top of ridge, 100 ft. above sec. cor., bears N. and S. Descend.

SUBDIVISION OF T. 13 S. R. 14 E. - CONTINUED.

CHAINS.	
18.00	Bottom of Dry Canon 800 ft. below ridge, course N. 80° E. Ascend.
40.00	Set a sandstone 15x10x10 ins. 10 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face, from which An aspen 4 ins. diam. bears N. 8° E. 22 lks. dist. marked $\frac{1}{2}$ S. 17 B.T. An aspen 4 ins. diam. bears S. 18° W. 28 lks. dist. marked $\frac{1}{2}$ S. 20 B.T.
60.00	Leave aspen timber, bears N. and S.
62.00	Enter scattering timber, bears N. and S.
62.10	Foot of perpendicular ledge, 15 ft. high, bears N. 20° E. and S. 20° W.
64.85	Top of ridge 800 ft. above canon, bears N. 50° W. and S. 50° E.; descend.
77.50	Small spring bears S. 60° E. about 1 ch. dist.
78.00	Bottom of hollow 150 ft. below ridge course S. 60° E. Ascend.
80.00	Cor. of secs. 17-18-19 and 20. Land mountainous. Soil gravelly, 3rd. rate. Timber pine and aspen. Undergrowth oak and deer brush. Good grass for grazing. Mountainous, or heavily timbered land, or land covered with dense undergrowth on 80.00 chs.

	West on a random line bet. secs. 18 and 19
40.00	Set temp. $\frac{1}{2}$ sec. cor.
80.00	Intersect W. bdy. of Tp. at the cor. of secs. 17-18-19 and 24, heretofore described. Thence I run East bet. secs. 18 and 19 Over mountainous land, through scattering pine and aspen timber. Descend.

SUBDIVISION OF T. 13 S. R. 14 E. -CONTINUED.

CHAINS.	
10.00	Bottom of hollow 75 ft. below sec. cor. course N. E. Ascend. through dense undergrowth.
20.00	Top of ridge 50 ft. above hollow, bears N. E. and S. W. Descend.
36.04	Bottom of Whitmore Canon, 200 ft. below ridge, course S. 60° E. Creek 3 lks. wide 3 ins. deep, in bottom. Ascend.
37.50	Top of low spur, bears N. W. and S. E.
38.50	Gulch 15 ft. deep, course S. 30° W. Ascend.
40.00	Set a limestone 18x10x5 ins. 18 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face, and raised a mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high N. of cor. Pits impracticable.
68.50	Top of divide ridge between Dry Canon and Whitmore Canon, 250 ft. above hollow, bears N. 60° W. and S. 35° E. Descend.
80.00	Cor. of secs. 17-18-19 and 20. Land mountainous. Soil gravelly loam and rocky, 2nd. and 4th. rates. Timber pine and aspen. Undergrowth sage and deer brush. Good grass for grazing. Mountainous land or land covered with dense under- growth 80.30 chs. August 15, 1902. At this cor. I set off 14° 11' N. on the decl. arc, and at 0 h. 2 m. 1. m. t. observe the sun on the meridian, the resulting lat. is 39° 41' N.
	N. 0° 03' W. bet. secs. 17 and 18
	Over mountainous land, through dense aspen saplings. Descend.
1.75	Bottom of hollow 10 ft. below sec. cor., course S. E.

SUBDIVISION OF T 13 S. R. 14 E. CONTINUED.

CHAINS

- Ascend.
- 3.00 Leave aspen saplings, bear E. and W.
- 15.00 Top of ridge 150 ft. above hollow, bears N.W. and S.E.
Enter scattering pine and aspen timber.
Descend.
- 24.50 Bottom of hollow 130 ft. below ridge course N.80°E.
Ascend.
- 30.00 Top of ridge 100 ft. above hollow, bears N.80°E. and
S.80°W.
Descend.
- 40.00 Set a sandstone 18x10x4 ins. 12 ins. in the ground,
for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face, from which
An aspen 6 ins. diam. bears N.85°E. 35 lks. dist.
marked $\frac{1}{2}$ S. 17 B.T.
An aspen 5 ins. diam. bears S.80°W. 47 lks. dist.
marked $\frac{1}{2}$ S. 18 B.T.
- 41.90 Creek 1 lk. wide 1 ins. deep, in bottom of hollow 120
ft. below ridge course S.80°E.
Leave timber; enter dense sagebrush.
Ascend.
- 49.00 Top of ridge 100 ft. above hollow bears N.80°W. and
S.80°E. Enter scattering timber.
Descend.
- 65.50 Bottom of hollow 40 ft. below ridge course S.80°E.
Ascend.
- 80.00 Top of ascent, bears N.60°E. and S.60°W.
Edge of mesa.
Set a sandstone 24x18x4 ins. 18 ins. in the ground
for cor. of secs. 7-8-17 and 18, marked with 4 notches
on S. and 5 notches on E. edges, from which
A pine 7 ins. diam. bears N.54°E. 53 lks. dist.,
marked T. 13 S. R. 14 E. S. 8 B.T.
An aspen 3 ins. diam. bears S.52°E. 155 lks. dist.
marked T. 13 S. R. 14 E. S. 17 B.T.

SUBDIVISION OF T. 13 S. R. 14 E. - CONTINUED.

CHAINS.

An aspen 4 ins. diam. bears S. 54°W. 18 lks. dist.
marked T. 13 S. R. 14 E. S. 18 B. T.

A pine 5 ins. diam. bears N. 23°W. 23 lks. dist.
marked T. 13 S. R. 14 E. S. 7 B. T.

Land mountainous.

Soil black loam, and rocky; 1st. and 4th. rates.

Timber pine and aspen.

Undergrowth sage and deer brush.

Good grass for grazing.

Mountainous land, or land covered with dense under-
growth 80.00 chs.

East on a random line bet. secs. 8 and 17

40.00 Set temp. $\frac{1}{2}$ sec. cor.

79.96 Intersect N. and S. line 10 lks. N. of the cor. of secs.
8-9-16 and 17. Thence I run

N. 89°56'W. on a true line bet. secs. 8 and 17

Over rolling mesa, through dense aspen saplings.

2.50 Leave aspen and enter dense sagebrush.

25.50 Leave sagebrush and enter dense aspen saplings, bear
N. and S.

32.50 Leave aspen saplings, and enter dense sagebrush, bears
N. and S.

39.00 Enter scattering pine and aspen timber, bears N. and
S.

39.98 Set a sandstone 24x8x5 ins. 18 ins. in the ground for
 $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face, from which

An aspen 8 ins. diam. bears N. 25°W. 37 lks. dist.
marked $\frac{1}{2}$ S. 8 B. T.

A pine 5 ins. diam. bears S. 60°W. 139 lks. dist.
marked $\frac{1}{2}$ S. 17 B. T.

53.00 Leave mesa, bears N. W. and S. E.

Descend.

SUBDIVISION OF T. 13 S. R. 14 E. - CONTINUED.

CHAINS.

- 65.00 Bottom of hollow, 100 ft. below mesa, course S.
Ascend.
- 79.96 The cor. of secs. 7-8-17 and 18.
Land mountainous and rolling mesa.
Soil black loam, and rocky; 1st. and 4th. rates.
Timber pine and aspen.
Undergrowth sagebrush and aspen saplings.
Good grass for grazing.
Mountainous land, or land covered with dense under-
growth 79,96 chs.
-
- West on a random line bet. secs. 7 and 18
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.10 Intersect W. bdy. of Tp. 12 lks. N. of the cor. of secs.
7-12-13 and 18, heretofore described. Thence I run
N. $89^{\circ}55'$ E. on a true line bet. secs. 7 and 18
Over mountainous land, through heavy pine and aspen
timber; descend.
- 7.50 Bottom of hollow 100 ft. below cor., course N. 30° W.
Ascend.
- 37.00 Leave heavy, and enter scattering timber bears N. E.
and S. W.
- 40.10 Top of ascent, 400 ft. above hollow, bears N. 20° E. and
S. 20° W. Edge of mesa.
Set a sandstone 18x10x6 ins. 12 ins. in the ground
for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, from which
An aspen 5 in. diam. bears N. 23 lks. dist., mark-
ed $\frac{1}{4}$ S. 7 B.T.
An aspen 4 in. diam. bears S. 25° E. 28 lks. dist.
marked $\frac{1}{4}$ S. 18 B.T.
Thence over mesa.
Through dense sagebrush.
- 80.10 Cor. of secs. 7-8-17 and 18.

SUBDIVISION OF T. 13 S. R. 14 E. -CONTINUED.

CHAINS.

Land mountainous and rolling mesa.
 Soil black loam and rocky; 1st. and 4th. rates.
 Timber pine and aspen.
 Undergrowth sagebrush.
 Good grass for grazing.
 Mountainous or heavily timbered land, or land covered with dense undergrowth 80.10 chs.

August 15, 1902.

August 15, 1902: At 7 h. 3 m. a. m. l. m. t., I set off $39^{\circ} 42' N.$ on the lat. arc, $13^{\circ} 57' N.$ on the decl. arc, and determine a true meridian with the solar at the cor. of secs. 7-8-17 and 18. Thence I run

N. $0^{\circ} 03' W.$ bet. secs. 7 and 8.

Over rolling mesa.

Through dense aspen saplings, sage and deer brush.

20.50 Enter heavy timber bears E. and W.

40.00 An aspen 6 ins. diam. for $\frac{1}{2}$ sec. cor. bet. secs. 7 and 8

I mark $\frac{1}{2}$ S. 7 on W. side, and 8 on E. side, from which

An An aspen 6 ins. diam. bears N. $35^{\circ} E.$ 62 lks. dist. marked $\frac{1}{2}$ S. 8 B.T.

An aspen 8 ins. diam. bears N. $70^{\circ} W.$ 60 lks. dist. marked $\frac{1}{2}$ S. 7 B.T.

63.00 Leave mesa, bears N. $30^{\circ} E.$ and S. $30^{\circ} W.$

Descend.

80.00 Set a limestone 18x8x6 ins. 12 ins. in the ground, for cor. of secs. 5-6-7 and 8, marked with 5 notches on S. and 5 notches on E. edges, from which

A pine 10 ins. diam. bears N. $30^{\circ} E.$ 52 lks. dist. marked T. 13 S. R. 14 E. S. 5 B.T.

A pine 15 ins. diam. bears S. $64^{\circ} E.$ 70 lks. dist. marked T. 13 S. R. 14 E. S. 8 B.T.

A pine 12 ins. diam. bears S. $38^{\circ} W.$ 35 lks. dist. marked T. 13 S. R. 14 E. S. 7 B.T.

SUBDIVISION OF T. 13 S. 14 E. -CONTINUED.

CHAINS.

A pine 12 ins. diam. bears N. 15° W. 70 lks. dist.
marked T. 13 S. R. 14 E. S. 6 B. T.

Land rolling mesa, and mountainous.

Soil black loam and rocky; 1st. and 4th. rates.

Timber pine and aspen.

Undergrowth sage and deer brush, and aspen saplings.

Good grass for grazing.

Mountainous, or heavily timbered land, or land covered with dense undergrowth 80.00 chs.

S. 89° 56' E. on a random line bet. secs. 5 and 8

40.00 Set temp. $\frac{1}{2}$ sec. cor.

80.16 Intersect N. and S. line 10 lks. N. of the cor. of secs. 4-5-8 and 9. Thence I run

N. 89° 52' W. on a true line bet. secs. 5 and 8

Over rolling mesa, through scattering timber and dense undergrowth.

15.50 Leave timber, bears N. and S.

40.08 Set a sandstone 14x12x5 ins., 9 ins. in the ground for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high N. of cor. Pits impracticable.

50.00 A cabin, bears S. about 8 chs. dist., known as Stone's cabin.

74.25 Leave mesa, bears N. 10° E. and S. 10° W.
Descend.

75.00 Enter scattering timber, bears N. and S.

80.16 The cor. of secs. 5-6-7 and 8.

Land rolling mesa and mountainous.

Soil sandy loam, 2nd. rate.

Timber pine and aspen.

Undergrowth sage and deer brush.

Good grass for grazing.

SUBDIVISION OF T. 13 S. R. 14 E. -CONTINUED.

CHAINS.	Mountainous, or heavily timbered land, or land covered with dense undergrowth 80.16 chs.
	S. 89° 55' W. on a random line bet. secs. 6 and 7
40.00	Set temp. $\frac{1}{2}$ sec. cor.
80.22	Intersect W. bdy. of Tp. 12 lks. S. of the cor. of secs. 1-3-7 and 12, heretofore described. Thence I run East on a true line bet. secs. 6 and 7 Over mountainous land, through dense undergrowth. Descend.
6.50	Leave undergrowth, and enter scattering timber bears N. E. and S. W.
8.50	Creek 2 lks. wide 1 ins. deep, in bottom of canon, 150 ft. below sec. cor., course N. E. Sheep Canon. Ascend.
20.00	Top of ridge 100 ft. above canon bears N. and S. Descend.
22.75	Bottom of hollow 40 ft. below ridge, course N. Ascend.
27.25	Top of ridge, 75 ft. above hollow, bears N. 20° W. and S. 20° E. Descend.
30.75	Bottom of hollow, 100 ft. below ridge, course N. 30° W. Ascend.
39.00	Top of ridge 150 ft. above hollow, bears N. W. and S. E. Descend.
40.22	Set a sandstone 18x10x4 ins. 12 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face, from which An aspen 4 ins. diam. bears N. 45° E. 18 lks. dist. marked $\frac{1}{2}$ S. 6 B. T. An aspen 4 ins. diam. bears S. 25° W. 22 lks. dist. marked $\frac{1}{2}$ S. 7 B. T.
51.50	Bottom of hollow 100 ft. below ridge, course N. W. Ascend.

SUBDIVISION OF T.13 S.R.14 E.-CONTINUED.

CHAIN 3.
 52.50 Leave timber bears N.W. and S.E.
 69.50 Enter scattering timber bears N. 60°W. and S. 60°E.
 80.22 The cor. of secs. 5-6-7 and 8.
 Land mountainous.
 Soil gravelly 3rd. rate.
 Timber pine and aspen.
 Undergrowth sage and deer brush.
 Good grass for grazing.
 Mountainous or heavily timbered land, or land covered with dense undergrowth 80.22 chs.
 August 16, 1902: At the noon hour the sky is overcast and solar observation is impossible.

N. 0°03'W. on a random line
 Bet. secs. 5 and 6

39.900 Intersect N. bdy. of Tp. at the cor. of secs. 5-6-31 and 32 heretofore described.
 Thence I run
 S. 0°03'E. on a true line bet. secs. 5 and 6
 Over mountainous land, through dense undergrowth, and scattering timber; ascend.
 18.00 Top of ascent, 100 ft. above cor., bears N.E. and S.W.
 Thence over rolling mesa.
 25.00 Leave mesa, bears N.W. and S.E.
 Descend.
 39.90 The cor. of secs. 5-6-7 and 8.
 Land mountainous and rolling mesa.
 Soil gravelly 3rd. rate.
 Timber pine and aspen.
 Undergrowth sage and deer brush.
 Good grass for grazing.
 Mountainous land, or land covered with dense undergrowth 39.90 chs.

August 16, 1902.

Subdivision of T. 13 S., R. 14 E. - Concluded.

GENERAL DESCRIPTION.

This township is a high rolling mountainous country, and the soil ranges from rich black loam to rocks and gravel. The soil in the bottoms of the hollows and on the heavily timbered land is generally rich black loam; the remaining portion of the township is generally gravelly loam; 2nd and 3rd rate.

The Township is well watered by Dry Canon Creek, Whitmore Canon Creek, and numerous other small streams and springs.

There is considerable pine and aspen timber all over the township.

There is no mineral in the township.

There is a cabin in section 8 known as Stone's cabin, claimant unknown.

There are no settlers in the township.

The township is very well adapted for summer grazing because of the abundance of grass and water.

There is an oil well now being bored in the N.E. $\frac{1}{2}$ of sec. 19, but oil in paying quantities has not yet been found. The well cannot be seen from line.

John R. Stewart.
U.S. Deputy Surveyor.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by _____

_____, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of _____

showing the respective capacities in which they acted:

- _____, *Chainman.*
- _____, *Chainman.*
- _____, *Moundman.*
- _____, *Moundman.*
- _____, *Arman.*
- _____, *Arman.*
- _____, *Flagman.*

In final affidavits re book A-294

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____

_____, United States Deputy Surveyor, in surveying all those parts or portions of the _____

_____ of the _____ meridian, _____ of _____

which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for _____

- _____, *Chainman.*
- _____, *Chainman.*
- _____, *Moundman.*
- _____, *Moundman.*
- _____, *Arman.*
- _____, *Arman.*
- _____, *Flagman.*

In final affidavits re book A-294

Subscribed and sworn to before me this _____ day of _____, 189 _____



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from _____ United States Surveyor General for _____, bearing date of the _____ day of _____, 189 _____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____ of the _____ meridian, in the _____ of _____, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

John G. Stewart

United States Deputy Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 189 _____ }



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salisbury, Cal. Jan 18, 1902, 189

The foregoing field notes of the survey of *the subdivision lines of Township 13 South Range 14 East of the Salt Lake Base and Meridian, Cal.*

executed by *John G. Stewart* under his contract No. *260*, dated *January 2, 1902*, 189 _____, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Edward Rudolph
United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General.

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BOOK A-294

7.3.08.

FIELD NOTES

OF THE SURVEY OF THE

EAST AND NORTH BOUNDARIES

of

Township No. 12 South, Range No. 14 East,

Of the SALT LAKE BASE AND Meridian,

in the STATE OF UTAH.

AS SURVEYED BY

John R. Stewart, United States Deputy Surveyor,

Under his Contract No. 250, dated January 2, 1902, 188x

Survey commenced August 17, 1902, 188x

Survey completed August 19, 1902, 189xx

6-151

Every 4th 5.6500'
10 " " 3.2592'

NAMES AND DUTIES OF ASSISTANTS.

Hyrum G. Smith Chairman

John G. Smith Chairman

Jacob A. Acord Moundman

Edwin A. Peay Moundman

Joseph A. Passey Axman

Andy J. Stewart Axman

Otto R. Stewart Flagman

For preliminary affidavits see book H. G. B. S. R. H. C.

BOOK A-294

INDEX DIAGRAM.

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30	29	28	27	26	25
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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, and do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of

....., Chainman.

....., Chainman.

Subscribed and sworn to before me this } day of, 189 }



WE, and do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of

....., Moundman.

....., Moundman.

Subscribed and sworn to before me this } day of, 189 }



WE, and do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of

....., Axman.

....., Axman.

Subscribed and sworn to before me this } day of, 189 }



I,, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of

....., Flagman.

Subscribed and sworn to before me this } day of, 189 }



East boundary of T.12 S., R.14 E.

Survey commenced August 17, 1902, and executed with a W. and L. E. Gurley light mountain transit, No. 1, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other reading to single minutes of arc; which is also the least count of the latitude and declination arcs.

The instrument was examined, tested on the true meridian, at Salt Lake City, found correct, and was approved by the surveyor general for Utah, on June 14, 1902.

I examine the adjustments of the instrument, and correct the level and collimation errors; then, to test the solar apparatus by comparing its indications resulting from solar observations made during p.m. and a.m. hours, with a true meridian, established by Polaris observation, I proceed as follows:

At the cor. of Tps. 12 and 13 S., Rs. 14 and 15 E., heretofore described, latitude $39^{\circ}43'27''$ N., longitude $110^{\circ}19'31''$ W., I set off $39^{\circ}43'$ N., on the lat. arc; $13^{\circ}31'$ N., on the decl. arc; and at 3 h 2 m p.m., l.m.t., determine a true meridian, with the solar, and mark a point thereof on a stone, firmly set in the ground, 5.00 chs. N. of the cor.

At 9 h 56 m p.m., l.m.t., I observe Polaris at eastern elongation, in accordance with the Manual, and mark a point in the line thus determined, by a tack driven in a wooden plug set in the ground, 5.00 chs. N. of the cor.

August 17, 1902.

August 18, 1902: At 6 h 32 m a.m., l.m.t., I lay off the azimuth of Polaris $1^{\circ}35.5'$ to the west, and mark a point in the true meridian, thus determined

 East boundary of T. 12 S., R. 14 E. -Continued.

Chains

by cutting a small groove in the stone, already set 5.00 chs. N. of the cor.; on which the true meridian falls 0.40 ins. east of the true meridian, established with the solar.

At 7 h 3 m a.m., l.m.t., I set off $39^{\circ}43'N.$, on the lat. arc; $13^{\circ}19'N.$, on the decl. arc; and mark a point in the true meridian, determined with the solar, by a cross on the stone, already set 5.00 chs. N. of the cor.; this mark falls 0.36 ins. east of the true meridian established by Polaris observation.

The solar apparatus by p.m. and a.m. observations defines positions for true meridians respectively about $0'21''$ west and $0'19''$ east of the true meridian established by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian, at 7 h 30 m a.m., l.m.t., $16^{\circ}20.7'W.$, the angle thus determined reduced by the table page 100 of the Manual, gives the mean mag. decl. $16^{\circ}15'E.$

From the cor. of Tps. 12 and 13 S., Rs. 14 and 15 E. heretofore described,

I run

North, bet. secs. 31 and 36.

Over mountainous land; through dense undergrowth.

Descend .

13.50 Bottom of hollow, 150 ft. below cor., course N.E.

Ascend .

15.50 Enter heavy pine and cedar timber, bears N.E. and S.W.

40.00 Set a limestone, $18 \times 13 \times 5$ ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked marked $\frac{1}{4}$ on W. face; from which

A pinon pine, 10 ins. diam., bears E., 30 lks.

East boundary of T.12 S., R.14 E.-Continued.

- Chains dist., marked $\frac{1}{2}$ S. 31, B.T.
 A pinon pine, 10 ins. diam., bears S. 45° W., 70
 lks. dist., marked $\frac{1}{2}$ S. 33, B.T.
- 57.00 Top of ridge, 300 ft. above hollow, bears N. 60° E. and
 S. 60° W.
 Leave timber, bears N. E. and S. W.
 Descend .
- 80.00 Set a limestone, 18x14x5 ins., 12 ins. in the ground, for
 cor. of secs. 25, 30, 31, and 36, marked with 5 notches
 on N. and 1 notch on S. edges; and raise a mound of
 stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impractic-
 able.
 Land, mountainous.
 Soil, gravelly loam; 2nd rate.
 Timber, cedar and pinon pine.
 Undergrowth, sage and oak brush.
 Good grass for grazing.
 Mountainous or heavily timbered land, or land covered
 with dense undergrowth, 80.00 chs.

North, bet. secs. 25 and 30.

Over mountainous ^{land} through dense undergrowth.

- Descend .
- 5.00 Enter heavy timber, bears N. E. and S. W.
- 32.00 Leave timber, bears N. E. and S. W.
- 33.50 Foot of descent, 300 ft. below sec. cor., bears N. 50° E.
 and S. 50° W. Enter bottom of Stone Cabin Canon.
- 36.50 Wash in canon, 10 ft. wide, 2 ft. deep, course N. 50° E.
 Leave canon bottom.
 Ascend .
- 39.50 Enter heavy timber, bears N. E. and S. W.
- 40.00 Set a limestone, 18x11x4 ins., 12 ins. in the ground,
 for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which
 A pinion pine, 8 ins. diam., bears S. 15° E., 35

 East boundary of T. 12 S., R. 14 E. -Continued.

Chains

- lks. dist., marked $\frac{1}{2}$ S. 30, B.T.
 A pinon pine, 12 ins. diam., bears S. 45° W., 125
 lks. dist., marked $\frac{1}{2}$ S. 25, B.T.
- 50.50 A limestone, ledge 20 ft. high, bears N.E. and S.W.
- 69.29 Top of ridge, 500 ft. above canon, bears E. and W.
 Descend .
- 77.00 Leave timber, bears E. and W.
- 80.00 Set a limestone, 18x10x4 ins., 12 ins. in the ground,
 for cor. of secs. 19, 24, 25, and 30, marked with 4
 notches on N. and 2 notches on S. edges; and raise a
 mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits
 impracticable.
 Land, mountainous.
 Soil, gravelly ; 3rd rate.
 Timber, cedar and pinon pine.
 Undergrowth, oak and sage brush.
 Good grass for grazing.
 Mountainous or heavily timbered land, or land covered
 with dense undergrowth, 80.00 chs.

 North, bet. secs. 19 and 24.

- Over mountainous land; through dense undergrowth,
 Descend .
- 4.00 Bottom of hollow, 50 ft. below cor., course N. 85° E.,
 Ascend .
- 14.50 Enter heavy timber, bears N.W. and E.
- 25.00 Top of ridge, 100 ft. above hollow, bears N. 60° E.
 and S. 80° W.
 Descend .
- 28.00 Leave heavy and enter scattering timber, bears E. and
 W.
- 40.00 Set a sandstone, 15x10x4 ins., 10 ins. in the ground;
 for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which
 A cedar, 11 ins. diam., bears S. 87° E., 185

 East boundary of T.12 S., R.14 E.-Continued.

- Chains lks.dist., marked $\frac{1}{2}$ S.19, B.T.
 A cedar, 15 ins.diam., bears S.71°W., 45 lks.
 dist., marked $\frac{1}{2}$ S.24, B.T.
- 45.00 A sandstone, ledge, 20 ft. high, bears N.80°W. and S.
 80°E.
- 48.00 Trail, bears N.80°W. and S.80°E.
- 50.00 Bottom of hollow, 75 ft. below ridge, course S.80°E.
 Ascend .
- 53.00 Ledge, 15 ft. high, bears E. and W.
- 71.50 Top of ridge, 100 ft. above hollow, bears E. and W.
 Descend .
- 80.00 Set a limestone, 18x15x7 ins., 12 ins. in the ground, for
 cor. of secs. 13, 18, 19, and 24, marked with 3 notches
 on N. and 3 notches on S. edges; from which
- A pinon pine, 10 ins.diam., bears N.73°E., 75
 lks.dist., marked T.12 S., R.15 E., S.18, B.T.
 A pinon pine, 5 ins.diam., bears S.34°E., 95
 lks.dist., marked T.12 S., R.15 E., S.19, B.T.
 A pinon pine, 7 ins.diam., bears S.45°W., 47
 lks.dist., marked T.12 S., R.14 E., S.24, B.T.
 A pinon pine, 9 ins.diam., bears N.12 °W., 144
 lks.dist., marked T.12 S., R.14 E., S.13, B.T.

Land mountainous.

Soil, gravelly and clay loam; 3rd rate.

Timber, cedar and pinon pine.

Undergrowth, oak and sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered
 with dense undergrowth, 80.00 chs.

August 18, 1902: At this cor. I set off 13° 14' N., on the
 decl. arc; and at 0 h 2 m p.m., l.m.t., observe the sun
 on the meridian, the resulting lat. is 39° 46' N.

North, bet. secs. 13 and 18.

East, boundary of T.12 S., R.14 E.-Continued.

Chains

Over mountainous land; through heavy timber;

Descend .

40.00 Set a sandstone, 20x9x4 ins., 15 ins. in the ground, for
 $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which

A pinon pine, 11 ins. diam., bears N. 82° E., 70
 lks. dist., marked $\frac{1}{2}$ S. 18, B.T.

A cedar, 9 ins. diam., bears S. 82° W., 55 lks.
 dist., marked $\frac{1}{2}$ S. 13, B.T.

58.00 Bottom of hollow, 250 ft. below sec. cor., course E.

Ascend .

64.50 Sandstone ledge, 15 ft. high, bears E. and W.

76.50 Leave heavy and enter scattering timber, bears E. and
 W.

80.00 Set a sandstone, 18x11x4 ins., 12 ins. in the ground, for
 cor. of secs. 7, 12, 13, and 18, marked with 2 notches on
 N. and 4 notches on S. edges; from which

A cedar, 12 ins. diam., bears N. 56° E., 265 lks.
 dist., marked T. 12 S., R. 15 E., S. 7, B.T.

A cedar, 5 ins. diam., bears S. 30° E., 170 lks.
 dist., marked T. 12 S., R. 15 E., S. 18, B.T.

A cedar, 12 ins. diam., bears S. 1° W., 300 lks.
 dist., marked T. 12 S., R. 14 E., S. 13, B.T.

A cedar, 11 ins. diam., bears N. 16° W., 297 lks.
 dist., marked T. 12 S., R. 14 E., S. 12, B.T.

Land, mountainous.

Soil, clay and gravelly; 3rd rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered
 with dense undergrowth, 80.00 chs.

North, bet. secs. 7 and 12.

Over mountainous land; through scattering timber.

East boundary of T.12 S., R.14 E. -Continued.

Chains Ascend .

3.50 Top of ridge, 40 ft. above sec. cor., bears N. 80° W. and
S. 80° E.

Enter heavy timber, bears N. 80° W. and S. 80° E.

Descend .

30.00 Bottom of hollow, 100 ft. below ridge, course N. E.

Ascend .

33.00 Top of ridge, 20 ft. above hollow, bears N. 60° E. and
S. 60° W.;

Descend .

38.40 Sandstone ledges, 10 ft. high, bears N. E. and S. W.

40.00 Set a sandstone, 17x11x4 ins., 13 ins. in the ground,
for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; from which

A cedar, 13 ins. diam., bears S. 80° E., 40 lks.
dist., marked $\frac{1}{4}$ S. 7, B. T.

A pinon pine, 10 ins. diam., bears W., 55 lks.
dist., marked $\frac{1}{4}$ S12, B. T.

80.00 Set a sandstone, 20x8x4 ins., 15 ins., in the ground,,
cor. of secs. 1, 6, 7, and 12, marked with 1 notch on
N. and 5 notches on S. edges; from which

A cedar, 10 ins. diam., bears N. 55° E., 160 lks.
dist., marked T. 12 S., R. 15 E., S. 6, B. T.

A pinon pine, 11 ins. diam., bears S. 67° E., 100
lks. dist., marked T. 12 S., R. 15 E., S. 7, B. T.

A pinon pine, 14 ins. diam., bears S. 40° W., 90
lks. dist., marked T. 12 S., R. 14 E., S. 12, B. T.

A red pine, 6 ins. diam., bears N. 49° W., 135 lks.
dist., marked T. 12 S., R. 14 E., S. 1, B. T.

Land, mountainous.

Soil, sandy and clay loam; 1st. and 2nd. rates.

Timber, pine and cedar.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, 80.00 chs.

East boundary of T.12 S., R.14 E. -Continued.

Chains

North, bet. secs. 1 and 6.

Over mountainous land; through heavy timber;
descend .

32.00 Bottom of hollow, 200 ft. below sec. cor., course W.

Ascend .

40.00 Set a limestone, 15x11x8 ins., 10 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; from which

A cedar, 7 ins. diam., bears S. 62° E., 25 lks.
dist., marked $\frac{1}{4}$ S. 6, B.T.

A pinon pine, 12 ins. diam., bears S. 70° W. 16
lks. dist., marked $\frac{1}{4}$ S. 1, B.T.

51.00 Top of ridge, 100 ft. above hollow, bears E. and W.

Descend .

80.00 Set temp. cor. of Tps. 11 and 12 S., R. 14 and 15 E.

Note: The permanent cor. of Tps. 11 and 12 S., Rs. 14
and 15 E., was set at 65.00 chs., For description of
same see notes of North boundary of T. 12 S., R. 14 E.
Land, mountainous.

Soil, clay and gravelly loam and rocky; 3rd and 4th
rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, 65.00 chs.

August 18, 1902.

August 19, 1902: At 7 h 3 m a.m., l.m.t., I set off
39° 49' N., on the lat. arc; 13° 00' N., on the decl. arc;
and determine a true meridian with the solar, at the
temp. cor. of Tps. 11 and 12 S., Rs. 14 and 15 E.,

Thence I run

West, on a random line along north boundary of Tp.

Eastern Part of
North boundary of T.12 S., R.14 E.-Continued.

Chains setting temp. $\frac{1}{4}$ sec. and sec. cors. at intervals of 40.00 chs., and at 188.20 chs. fall 15.00 chs. North of the cor. of secs. 2, 3, 34, and 35, which is a sandstone, 11 x 11 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general. I abandon my random line, in accordance with "Special Instructions" and begin at the cor. of secs. 2, 3, 34, and 35, and run

East, on a true line bet. secs. 2 and 35.

Over level bottom of Nine Mile Canon; through dense sage brush and greasewood.

14.50 Nine Mile Creek, 15 lks. wide, 12 ins. deep, rocky bottom course N. 50° E.

17.50 Leave canon bottom, bears N. E. and S. W.

Ascend abruptly over a series of perpendicular ledges, from 10 ft. to 50 ft. high.

37.25 Top of ridge, 700 ft. above canon, bears N. and S.

Descend abruptly, continue over ledges.

39.45 Ledge, 30 ft. high, bears N. 25° E. and S. 25° W.

40.00 Bottom of hollow, 300 ft. below ridge, course N. 20° E.

Ascend abruptly, continue over ledges.

63.50 Top of ridge, 300 ft. above hollow, bears N. and S.

Descend abruptly, continue over ledges.

68.20 Set a sandstone, 18x9x5 ins., 12 ins. in the ground, for

$\frac{1}{4}$ sec. cor., marked $\frac{1}{2}$ on N. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

94.75 Bottom of hollow, 500 ft. below ridge, course N. 30° W.

Leave ledges.

Ascend .

102.25 Top of ridge, 200 ft. above hollow, bears N. W. and S. 30° E.

Descend .

108.20 Set a limestone, 18x11x4 ins., 12 ins. in the ground, for

cor. of secs. 1, 2, 35, and 36, marked with 1 notch on

Eastern Part of
North boundary of T.12 S., R.14 E. -Continued.

Chains E. and 5 notches on W. edges; from which

A pinon pine, 5 ins. diam., bears S. 35° E., 60

lks. dist., marked T.12 S., R.14 E., S.1, B.T.

A pinon pine, 8 ins. diam., bears S. 50° W., 85

lks. dist., marked T.12 S., R.14 E., S.2, B.T.

No other trees within limits; raise a mound of stone,
2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.

Land, mountainous.

Soil, clay and rocky; 2nd and 4th rate.

Timber, cedar and pinon pine (very scattering).

Undergrowth, sage and greasewood.

Good grass for grazing.

Mountainous land, or land covered with dense under-
growth, 108.20 chs.

East, on a true line bet. secs. 1 and 36.

Over mountainous land; through scattering timber and
scattering undergrowth.

Descend .

40.00 Set a sandstone, 18x9x7 ins., 12 ins. in the ground,
for ¼ sec. cor., marked ¼ on N. face; and raise a mound
of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits imprac-
ticable.

43.55 Bottom of hollow, 500 ft. below sec. cor., course N.;
Ascend .

50.50 Top of ridge, 300 ft. above hollow, bears N.E. and S.
Descend .

59.00 Bottom of hollow, 250 ft. below ridge, course N. 60° E.
Ascend .

78.60 Top of ridge, 300 ft. above hollow, bears S. and N. 30° E.
Descend .

80.00 Intersect East Boundary of Tp:15.00 chs. South of
the temp. cor. (I destroy temp. cor.)

Set a sandstone, 18x8x6 ins., 12 ins. in the ground, for

 North boundary of T.12 S., R.14 E. (Eastern Part) Concluded.

Chains cor. of Tps. 11 and 12 S., Rs. 14 and 15 E., marked with
6 notches on each edge; from which

A pinon pine, 7 ins. diam., bears N, 70° E., 65
lks. dist., marked T. 11 S., R. 15 E., S. 31, B. T.

A pinon pine, 7 ins. diam., bears S. 35° E., 155
lks. dist., marked T. 12 S., R. 15 E., S. 6, B. T.

A pinon pine, 14 ins. diam., bears S. 33° W., 70
lks. dist., marked T. 12 S., R. 14 E., S. 1, B. T.

A pinon pine, 4 ins. diam., bears N. 34° W., 75
lks. dist., marked T. 11 S., R. 14 E., S. 36, B. T.

Land, mountainous.

Soil, clay and gravelly; 3rd rate.

Timber, scattering cedar and pinon pine.

Undergrowth, sage.

Good grass for grazing.

Mountainous land, 80.00 chs.

August 19, 1902: At this cor. I set off 12° 55' N., on
the decl. arc; and at 2 p.m., l.m.t., observe the
sun on the meridian, the resulting lat. is 39° 49' N.

 NORTH BOUNDARY of T.12 S., R.14 E. (Western Part)

From the cor. of secs. 5, 6, 31, and 32, on North Bdy.
of Tp., which is a sandstone, 10 x 8 x 4 ins., above
ground, firmly set, and marked and witnessed as des-
cribed by the surveyor general.

I run

West on a random line bet. secs. 6 and 31.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

77.72 Intersect West boundary of Tp., 16 lks. South of
the cor. of Tps. 11 and 12 S., Rs. 13 and 14 E., which
is a sandstone, 6 x 11 x 6 ins., above ground, firmly set,

 North boundary of T.12 S., R.14 E. (Western Part) Concluded.

Chains and marked and witnessed as described by the surveyor general.

Thence I run

S. 89° 53' E., on a true line bet. secs. 31 and 6.

Over mountainous land; through scattering cedar and pinon pine timber.

Ascend abruptly over a series of ledges.

23.00 Top of ridge, 400 ft. above Tp. cor., bears N. 20° W. and S. 20° E.

Descend.

32.40 Bottom of Hollow, 450 ft. below ridge, course S. 25° E.

Ascend.

37.72 Set a sandstone, 18x9x7 ins., 12 ins. in the ground; for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

49.00 Top of ridge, 190 ft. above hollow, bears N. 30° W. and S. 30° E.;

Descend.

71.00 Bottom of hollow, 250 ft. below ridge, course S. E.;

Ascend.

77.72 The cor. of secs. 5, 6, 31, and 32.

Land, mountainous.

Soil, gravelly and rocky; 3rd and 4th rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Ledges on 77.72 chs.

Mountainous land, 77.72 chs.

August 19, 1902.

Boundaries of T.12 S., R.14 E. Concluded.

Boundaries of T.12 S., R.14 E.

Latitudes, departures, and closing errors.

Line Designated	True bearing	dist- ance chs.	Latitudes		Departures	
			N. chs.	S. chs.	E. chs.	W. chs.
S.bdy.T.12 S.,R.14 E.	West	507.54				507.54
W.bdy.T.12 S.,R.14 E.	North	464.50	464.50			
N.bdy.T.12 S.,R.14 E.	S.89°53'E.	77.72		.16	77.72	
N.bdy.T.12 S.,R.14 E.	East.	428.20			428.20	
E.bdy.T.12 S.,R.14 E.	South	465.00		465.00		
Convergency					.60	
Totals			464.50	465.16	506.58	507.54
Error in lat.				464.50		506.58
Error in dep.				.66		1.98

This township is mountainous. It is well watered and well adapted for grazing purposes. It should be subdivided.

John R. Stewart.
U.S. Deputy Surveyor.

August 19, 1902.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by.....

....., United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of.....

showing the respective capacities in which they acted:

-, Chainman.
-, Chainman.
-, Moundman.
-, Moundman.
-, Axman.
-, Axman.
-, Flagman.

In final affidavits see book M. J.P. 11

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted.....

....., United States Deputy Surveyor, in surveying all those parts or portions of the.....

..... of the..... meridian,..... of....., which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for.....

-, Chainman.
-, Chainman.
-, Moundman.
-, Moundman.
-, Axman.
-, Axman.
-, Flagman.

In final affidavits see book M. J.P. 11

Subscribed and sworn to before me this..... }
day of....., 189..... }



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, John A. Stewart, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from United States Surveyor General for Utah, bearing date of the 18 day of January, 1892, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the East and North Boundaries of the 12 meridian, in the South Range of Utah, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

United States Deputy Surveyor.

Subscribed by said John A. Stewart, and sworn to before me }
 this 18 day of January, 1892 }



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

John A. Stewart, Utah January 18, 1902, 1892

The foregoing field notes of the survey of The East and North Boundaries
of Township 12 South Range 14 East of the Salt Lake
Base Meridian, Utah

executed by John A. Stewart
 under his contract No. 250, dated January 2, 1902 1892, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Edward H. Anderson
 United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in Utah, has been correctly copied from the original notes on file in this office.

United States Surveyor General.

E. S. B.

4-079.

K.

BOOK A-294

Filed Jan 21-1903
WJH
243
17-13-03

FIELD NOTES

J. S. B.

Retracement
OF THE ~~SURVEY~~ OF THE

West Boundary

of

Township No. 12 South, Range No. 14 East,

Of the SALT LAKE BASE AND Meridian,

in the STATE OF UTAH

AS SURVEYED BY

John R. Stewart, United States Deputy Surveyor,

Under his Contract No. 250, dated January 2, 1902, ~~189~~

Retracment
Survey commenced August 20, 1902, ~~189~~

Retracment
Survey completed August 20, 1902, ~~189~~

Net low 006450

NAMES AND DUTIES OF ASSISTANTS.

Hyrum G. Smith Chairman

John G. Smith Chairman

Jacob A. Acord Moundman

Edwin A. Peay Moundman

Joseph A. Passey Axman

Andy J. Stewart Axman

Otto R. Stewart Flagman

For preliminary affidavits see leaf 6. Sp 185 R26

BOOK A-294

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	314	313	300	289	277	266					
18	312	17	299	16	288	15	276	14	265	13	229
311	310	298	287	275	264						
19	308	20	297	21	285	22	274	23	262	24	228
307	306	296	284	273	261						
30	305	29	295	28	283	27	272	26	260	25	227
305	303	294	282	271	259						
31	303	32	293	33	281	34	270	35	258	36	226

Meanders Page _____

PRELIMINARY OATHS OF ASSISTANTS.

WE, _____ and _____
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of _____

_____, *Chainman.*

_____, *Chainman.*

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of _____

_____, *Moundman.*

_____, *Moundman.*

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of _____

_____, *Axman.*

_____, *Axman.*

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



I, _____, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of _____

_____, *Flagman.*

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



Retracement of West Boundary of T.12 S., R.14 E.

Survey commenced August 20, 1902, and executed with a W. and L. E. Gurley light mountain transit, No. 1, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the latitude and declination arcs.

Note: For complete test of Instrument see Notes of East boundary of T.12 S., R.14 E. *Book A*

August 20, 1902: At 7 h 2 m a.m., l.m.t., I set off $39^{\circ} 47' N.$, on the lat. arc; $12^{\circ} 40' N.$, on the decl. arc; and determine a true meridian, with the solar, at the cor. of secs. 7, 12, 13, and 18, on West boundary of T.12 S., R.14 E., which is a sandstone, 4x10x9 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general.

Note: On account of the closing of the East boundary on the north boundary I am led to believe that discrepancies exist in the west boundary of this township; therefore I proceed to retrace enough of said boundary to locate the error, as follows:

From the cor. of secs. 7, 12, 13, and 18,

I run

South, on a retracement line bet. secs. 13 and 18.

40.10 The $\frac{1}{2}$ sec. cor. bet. secs. 13 and 18, which is a sandstone, 5 x 8 x 5 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general.

64.50 The cor. of secs. 13, 18, 19, and 24, which is a sandstone, 6x11x10 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general.

Note: This locates the error therefore it is not necessary to retrace farther.

August 20, 1902.

Note: There being no public or other officer, authorized to administer oaths, within reasonable distance at the beginning or ending of this survey; in order to save

Retracement of West boundary of T. 12 S., R. 14 E. - Concluded

time and expense I administer the preliminary and final oaths myself.

John R. Stewart,
U.S. Deputy Surveyor.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by John R. Stewart

United States Deputy Surveyor, to assist in running, measuring, and

marking the lines and corners described in the foregoing field notes of the survey of ^(retracement and res) S. and E. bdy. of T. 13 S., R. 12 E. Retracement of N. and W. bdy. of T. 13 S., R. 12 E.; Retracement and Resurvey of S., E., and N. bdy. of T. 14 S., R. 15 E.; Retracement of W. bdy. of T. 14 S., R. 15 E.; Retracement of S. bdy. of T. 13 S., R. 14 E. Retracement and Resurvey of these West boundaries of T. 13 S., R. 14 E. and Retracement of frac. W. bdy. of T. 12 S., R. 14 E. of the Salt Lake Basin & Meridian. etc.

- Hyrum G. Smith Chainman.
John G. Smith Chainman.
Jacob A. Acord Moundman.
Edwin A. Peay Moundman.
Joseph A. Passey Axman.
Andy J. Stewart Axman.
Otto R. Stewart Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted: John R. Stewart

United States Deputy Surveyor, in surveying all

those parts or portions of the retracement and resurvey of the South East, bdy. of T. 13 S., R. 12 E.; retracement N. and W. bdy. of T. 13 S., R. 12 E.; retracement and resurvey of S., E., and N. bdy. of T. 14 S., R. 15 E.; retracement W. bdy. of T. 14 S., R. 15 E.; retracement S. bdy. of T. 13 S., R. 14 E.; retracement and resurvey W. bdy. of T. 13 S., R. 14 E.; and retracement of frac. W. bdy. of T. 12 S., R. 14 E. of the Salt Lake

Base and meridian, States of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor

General for Utah

- Hyrum G. Smith Chainman.
John G. Smith Chainman.
Jacob A. Acord Moundman.
Edwin A. Peay Moundman.
Joseph A. Passey Axman.
Andy J. Stewart Axman.
Otto R. Stewart Flagman.

Subscribed and sworn to before me this 16th day of September, 1902, 1899

John R. Stewart U.S. Deputy Surveyor



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, John R. Stewart, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Edward H. Anderson United States Surveyor General for Utah, bearing date of the 2nd day of January, 1902, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of ^{retained file} the retracement and resurvey of S. and E. bdy. T. 13 S., R. 12 E.; retracement N. and W. bdy. T. 13 S., R. 12 E.; retracement and resurvey S., E., and N. bdy. T. 14 S., R. 15 E.; retracement W. bdy. T. 14 S., R. 15 E.; retracement S. bdy. T. 13 S., R. 14 E.; retracement and resurvey W. bdy. T. 13 S., R. 14 E. and retracement frac. W. bdy. T. 12 S., R. 14 E. of the Salt Lake Base and meridian, in the State of Utah, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said ^{retained file} survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such ^{retained file} survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

John R. Stewart
United States Deputy Surveyor.

Subscribed by said John R. Stewart, and sworn to before me }
this 20 day of January, 1902

Edward H. Anderson
U.S. Surveyor-General for
Utah



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Walt P. Kelly Utah Jan 18 1904, 189

The foregoing field notes of the survey of ^{retained file} the West Boundary of Township 12 North Range 14 East of the Salt Lake Base and Meridian, Utah

executed by John R. Stewart
under his contract No. 200, dated January 2 1902, 189, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the ^{retained file} surveys they describe, are hereby approved.

Edward H. Anderson
United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General.

253
Filled Jan 27 1903
WJTB
H.M.G.
J.H.

4-679.

4

Exp
J.P.

BOOK A-294

FIELD NOTES

OF THE SURVEY OF THE

130.

Subdivision

of

Township No. 12 South, Range No. 14 East,

Of the SALT LAKE BASE AND Meridian,

in the STATE OF UTAH

AS SURVEYED BY

John R. Stewart, United States Deputy Surveyor,

Under his Contract No. 250, dated January 2, 1902, 189

Survey commenced August 20, 1902, 189

Survey completed August 30, 1902, 189

6-151

high 53 10 46¹⁸ ✓
Cry 107.46¹⁸ ✓

NAMES AND DUTIES OF ASSISTANTS.

Hyrum G. Smith Chairman

John G. Smith Chairman

Jacob A. Acord Moundman

Edwin A. Peay Moundman

Joseph A. Passey Axman

Andy J. Stewart Axman

Otto R. Stewart Flagman

In preliminary affidavits selected A. F. 125 B. 12. 8

BOOK A-294

INDEX DIAGRAM.

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	31	303	32	293	33	281	34	270	35	258	36	226

Meanders Page _____

PRELIMINARY OATHS OF ASSISTANTS.

WE, _____ and _____
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of _____

_____, *Chainman.*
_____, *Chainman.*

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of _____

_____, *Moundman.*
_____, *Moundman.*

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of _____

_____, *Axman.*
_____, *Axman.*

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



I, _____, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of _____

_____, *Flagman.*

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



Subdivision of T.12 S., R.14 E.

Survey commenced August 20, 1902; and executed with a W. and L. E. Gurley light mountain transit, No. 1, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other reading to single minutes of arc; which is also the least count of the latitude and declination arcs.

The instrument was examined, tested on the true meridian, at Salt Lake City, found correct, and was approved by the surveyor general for Utah, on June 14, 1902.

I examine the adjustments of the instrument, and correct the level and collimation errors; then, to test the solar apparatus, by comparing its indications resulting from solar observations made during p.m. and a.m. hours, with a true meridian, established by observation on Polaris; I proceed as follows:

At the cor. of secs. 1, 2, 35, and 36, on S. Bdy. of Tp., latitude $39^{\circ}43'27''$ N., longitude $110^{\circ}20'38''$ W., I set off $39^{\circ}43'$ N., on the lat. arc; $12^{\circ}32'$ N., on the decl. arc; and at 3 h 57 m p.m., l.m.t., determine a true meridian with the solar, and mark a point thereof on a stone, firmly set in the ground, 5.00 chs. N. of the cor.

At 9 h $\frac{3}{4}$ m p.m., l.m.t., I observe Polaris at eastern elongation, in accordance with the Manual, and mark a point in the line thus determined, by a tack driven in a wooden plug set in the ground, 5.00 chs. N. of the cor.

August 20, 1902.

August 21, 1902: At 6 h 31 m a.m., l.m.t., I lay off the azimuth of Polaris $1^{\circ}34'$ to the west, and mark

Subdivision of T.12 S., R.14 E.-Continued.

a point in the true meridian, thus determined, by cutting a small groove in the stone, already set, 5.00 chs. N. of the cor.; this mark falls 0.35 ins. east of the mark determined by the solar.

At 7 h 2 m a.m., l.m.t., I set off $39^{\circ}43'N.$, on the lat. arc; $12^{\circ}21'N.$, on the decl. arc; and mark a point in the true meridian, determined with the solar by a cross on the stone, already set 5.00 chs. N. of the cor.; this mark falls 0.38 ins. east of the true meridian established by Polaris observation.

The solar apparatus by p.m. and a.m. observations defines positions for true meridians, respectively about $0'18''$ west and $0'20''$ east of the true meridian, established by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian, at 7 h 30 m a.m., is $16^{\circ}20.7'$ West, the angle thus determined reduced by the table page 100 of the Manual, gives the mean mag. decl. $16^{\circ}15'E.$

From the cor. of secs. 1, 2, 35, and 36, on S. bdy. of Tp., heretofore described

I run

$N.0^{\circ}01'W.$, bet. secs. 35 and 36.

Over mountainous land; through dense undergrowth.

Descend.

13.95 Bottom of hollow, 100 ft. below sec. cor., course N.W.

Ascend through scattering timber.

21.00 Top of ridge, 100 ft. above hollow, bears $N.30^{\circ}W.$ and $S.20^{\circ}E.$

Descend.

30.00 Leave timber, bears N.E. and S.W.

40.00 Set a quartzite stone, $24 \times 18 \times 4$ ins., 18 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which

Subdivision of T.12 S., R.14 E. -Continued.

Chains

An aspen, 5 ins. diam., bears N.40°E., 75 lks.

dist., marked $\frac{1}{2}$ S.36, B.T.

An aspen, 6 ins. diam., bears N.5°W., 38 lks.

dist., marked $\frac{1}{4}$ S.35, B.T.

41.75 Wash in bottom of stone Cabin Canon, 500 ft. below
sec. cor., course N.50°E..

Ascend .

47.00 Sandstone, ledge, 40 ft. high, bears N.50°E. and S.50°W.

48.00 Enter scattering timber, bears N.E. and S.W.

72.75 Top of ridge, 350 ft. above canon, bears N.E. and S.60°
W.

Leave timber, bears N.E. and S.W.

Descend .

80.00 Set a sandstone, 18x12x4 ins., 12 ins. in the ground, for
cor. of secs. 25, 26, 35, and 36, marked with 1 notch
on E. and 1 notch on S. edges; and raise a mound
of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits imprac-
ticable..

Land, mountainous.

Soil, gravelly and rocky; 3rd and 4th rate.

Timber, cedar and pinion pine and aspen.

Undergrowth, mahogany and deer brush.

Good grass for grazing.

Mountainous land, or land covered with dense under-
growth, 80.00 chs.

East, on a random line bet. secs. 25 and 36.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

80.02 Intersect E. bdy. of Tp., 17 lks. N. of the cor. of secs.
25, 30, 31, and 36, heretofore described.

Thence I run

N.89°53'W., on a true line bet. secs. 25 and 36.

 Subdivision of T.12 S., R.14 E. -Continued.

Chains

- Over mountainous land; through dense undergrowth.
 Descend .
- 28.00 Enter heavy timber, bears N. and S.
- 40.01 Set a limestone, 24x10x4 ins., 18 ins. in the ground,
 for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; from which
- A pinon pine, 22 ins. diam., bears N. 3° E., 50
 lks. dist., marked $\frac{1}{2}$ S. 25, B.T.
- A red pine, 36 ins. diam., bears S. 45° W., 175
 lks. dist., marked $\frac{1}{2}$ S. 36, B.T.
- 46.00 Bottom of Stone Cabin Canon, 350 ft. below sec. cor.,
 course N. 50° E.
 Ascend .
- 67.00 Leave timber, bears N. and S.
- 72.00 Top of ridge, 400 ft. above canon, bears N. E. and S. W.
 Descend .
- 80.02 The cor. of secs. 25, 26, 35, and 36,
 Land, mountainous.
 Soil, graveyyl; 3rd rate.
 Timber, pine, cedar, mahogany, and cottonwood.
 Undergrowth, sage and deer brush.
 Good grass for grazing.
 Mountainous or heavily timbered land, or land covered
 with dense undergrowth, 80.02 chs.

 N. 0° 01' W., bet. secs. 25 and 26.

- Over mountainous land; through dense undergrowth.
 Descend .
- 12.00 Begin more rapid descent, bears E. and W.
- 24.50 Creek, 2 lks. wide, 1 inch deep, in bottom of North
 Fork of Stone Cabin Canon, 350 ft. below sec. cor.,
 course East.
 Ascend through heavy timber .
- 34.97 Ledge, 12 ft. high, bears N. 30° E. and W.

Subdivision of T.12 S., R.14 E. -Continued.

Chains

40.00 Set a sandstone, 20x12x4 ins., 15 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{4}$ on W. face; from which

A cedar, 8 ins. diam., bears N. 80° E., 100 lks. dist., marked $\frac{1}{4}$ S. 25, B. T.

A piñon pine, 15 ins. diam., bears S. 35° W., 55 lks. dist., marked $\frac{1}{4}$ S. 26, B. T.

63.00 Top of rapid ascent, 200 ft. above canon, ascend more gradually.

76.00 Trail, bears N. E. and S. W.

80.00 Set a limestone, 22x13x4 ins. 16 ins. in the ground, for cor. of secs. 23, 24, 25, and 26, marked with 2

notches on S. and 1 notch on E. edges; from which

A piñon pine, 5 ins. diam., bears N. 35° E., 77 lks. dist., marked T. 12 S., R. 14 E., S. 24, B. T.

A cedar, 4 ins. diam., bears S. 36° E., 80 lks. dist., marked T. 12 S., R. 14 E., S. 25, B. T.

A cedar, 14 ins. diam., bears S. 41° W., 85 lks. dist., marked T. 12 S., R. 14 E., S. 26, B. T.

A piñon pine, 5 ins. diam., bears N. 15 ° W., 175 lks. dist., marked T. 12 S., R. 14 E., S. 23, B. T.

Land, mountainous.

Soil, gravelly and rocky; 3rd and 4th rate.

Timber, pine and cedar.

Undergrowth, sage and mahogany brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

August 21, 1902; At this cor. I set off 12° 16' N., on the decl. arc; and at 0 h 2 m p.m., l.m.t., observe the sun on the meridian, the resulting lat. is 39° 45' N.

S. 89° 53' E., on a random line bet. secs. 24 and 25

40.00 Set temp. $\frac{1}{2}$ sec. cor.

Subdivision of T.12 S., R.14 E. -Continued.

Chains

80.20 Intersect E. bdy. of Tp., 5 lks. S. of the cor. of secs. 19, 24, 25, and 30, heretofore described.

Thence I run

N. 89° 55' W., on a true line bet. secs. 24 and 25.

Over mountainous land; through dense undergrowth; ascend.

22.00 Enter heavy timber and leave undergrowth, bears N. 70° W. and S. 70° E.

40.10 Set a sandstone, 20x7x4 ins., 15 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from which

A cedar, 14 ins. diam., bears N. 72° E., 215 lks. dist., marked $\frac{1}{4}$ S. 24, B.T.

A red pine, 8 ins. diam., bears S. 4° W., 130 lks. dist., marked $\frac{1}{4}$ S. 25, B.T.

45.00 Top of ridge, 100 ft. above sec. cor., bears N. 70° W., and S. 70° E.

Descend.

67.00 Bottom of swale, 30 ft. below ridge, course S. 30° E.

Ascend.

77.50 Trail, bears N. E. and S. W.

80.20 The cor. of secs. 23, 24, 25, and 26.

Land, mountainous.

Soil, gravelly; 3rd rate.

Undergrowth, oak, sage and deer brush.

Good grass for grazing.

Timber, pine and cedar.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.20 chs.

N. 0° 01' W., bet. secs. 23 and 24.

Over mountainous land, through heavy timber.

Subdivision of T.12 S., R.14 E. -Continued.

Chains

Ascend .

10.00 Top of ridge, 24 ft. above sec. cor., bears N. 70° W. and
S. 70° E.

Leave heavy and enter scattering timber, bears with
ridge.

Descend .

33.50 Bottom of hollow, 75 ft. below ridge, course N. 60° E.

Ascend .

40.00 Set a sandstone, 18x12x5 ins., 12 ins. in the ground,
for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which

A pinon pine, 15 ins. diam., bears S. 85° E., 110
lks. dist., marked $\frac{1}{2}$ S. 24, B. T.

No other trees within limits; raise a mound of stone,
2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

56.50 Top of ridge, 75 ft. above hollow, bears N. 65° E. and S.
65° W.

Descend .

66.35, Bottom of hollow, 60 ft. below ridge, course N. 65° E.

Ascend .

72.00 Enter heavy timber, bears E. and W.

75.50 Leave heavy and enter scattering timber, bears E.
and W.

78.00 Top of ridge, 100 ft. above hollow, bears E. and W.

Descend .

80.00 Set a sandstone, 20x11x4 ins., 15 ins. in the ground, for
cor. of secs. 13, 14, 23, and 24, marked with 3 notches on
S. and 1 notch on E. edges; and raise a mound of stone,
2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, mountainous.

Soil, gravelly and rocky; 3rd and 4th rate.

Timber, pine and cedar .

Undergrowth, sage and oak brush.

Good grass for grazing.

Mountainous or heavily timbered land, 80.00 chs.

Subdivision of T.12 S., R.14 E. -Continued.

Chains

- S.89°55'E., on a random line bet. secs. 13 and 24.
- 40.00 Set temp. $\frac{1}{2}$ sec. cor.
- 80.30 Intersect E. bdy. of Tp., 12 lks. S. of the cor. of secs. 13, 18, 19, and 24, heretofore described.
- Thence I run
- West, on a true line bet. secs. 13 and 24.
- Over mountainous land; through dense undergrowth.
- Ascend gradually.
- 17.00 Enter heavy timber, bears N.E. and S.W.
- 22.00 Top of ridge, 50 ft. above sec. cor., bears N.60°E. and S.60°W.
- Descend .
- 31.00 A log cabin (claimant unknown), bears North about 3.00 chs. dist.
- 40.15 Set a limestone, 30x11x10 ins., 22 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; from which
- A pinon pine, 8 ins. diam., bears N.32°W., 80 lks. dist., marked $\frac{1}{2}$ S.13, B.T.
- A pinon pine, 7 ins. diam., bears S.36°E., 75 lks. dist., marked $\frac{1}{2}$ S.24, B.T.
- 43.00 Bottom of swale, 30 ft. below ridge, course N.
- Leave heavy and enter scattering timber . Ascend .
- 80.30 The cor. of secs. 13, 14, 23, and 24.
- Land, mountainous.
- Soil, gravelly; 3rd rate.
- Timber, cedar and pinon pine.
- Undergrowth, sage and oak brush.
- Good grass for grazing.
- Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.30 chs.

August 21, 1902.

Subdivision of T.12 S., R.14 E. -Continued.

Chains

August 22, 1902: At 7 h 3 m a.m., l.m.t., I set off $39^{\circ} 46' N.$, on the lat. arc; $12^{\circ} 01' N.$, on the decl. arc; and determine a true meridian, with the solar, at the cor. 13, 14, 23, and 24.

Thence I run

$N. 0^{\circ} 01' W.$, bet. secs. 13 and 14.

Over mountainous land; through scattering timber.

Descend .

10.75 Bottom of smooth hollow, 175 ft. below sec. cor., course N.E.

Ascend .

14.50 Enter heavy timber, bears N.E. and S.W.

32.00 Top of ridge, 40 ft. above hollow, bears $N. 60^{\circ} E.$ and $S. 30^{\circ} W.$

Descend .

40.00 Set a limestone, $20 \times 7 \times 4$ ins., 15 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which

A pinon pine, 11 ins. in diam., bears $S. 87^{\circ} E.$, 90 lks. dist., marked $\frac{1}{2}$ S. 13, B.T.

A pinon pine, 5 ins. diam., bears $S. 56^{\circ} W.$, 55 lks. dist., marked $\frac{1}{2}$ S. 14, B.T.

42.00 Leave timber, bears $N. 60^{\circ} E.$ and $S. 60^{\circ} W.$

47.50 Bottom of hollow, 40 ft. below ridge, course $N. 60^{\circ} E.$

Ascend .

Enter dense undergrowth, bears $N. 60^{\circ} E.$ and $S. 60^{\circ} W.$

57.00 Leave undergrowth and enter heavy timber, bears N.E. and S.W.

67.00 Top of ridge, 100 ft. above hollow, bears $N. 60^{\circ} E.$ and $S. 60^{\circ} W.$; descend .

Leave timber, bears N.E. and S.W.

73.00 Trail, bears $N. 70^{\circ} W.$ and $S. 70^{\circ} E.$

80.00 Set a sandstone, $18 \times 13 \times 5$ ins., 12 ins. in the ground, for cor. of secs. 11, 12, 13, and 14, marked with 4 notches on S. and 1 notch on E. edges; from which

Subdivision of T.12 S., R.14 E. -Continued:

Chains:

A cedar, 7 ins. diam., bears N.40° E., 115 lks.
dist., marked T.12 S., R.14 E., S.12, B.T.

A cedar, 8 ins. diam., bears N.44° W., 42 lks.
dist., marked T.12 S., R.14 E., S.11, B.T.

No other trees within limits; raise a mound of stone,
2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.

Land, mountainous.

Soil, gravelly; 3rd rate.

Timber, pine and cedar.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered
with dense undergrowth, 50.00 chs.

East, on a random line bet. secs. 12 and 13.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

80.10 Intersect E. bdy. 12 lks. N. of the cor. of secs. 7, 12,
13, and 18, heretofore described.

Thence I run

N.89° 55' W., on a true line bet. secs. 12 and
13.

Over mountainous land; through heavy timber.

Descend gradually .

20.00 Leave heavy and enter scattering timber, bears N. and
S.

33.00 Enter heavy timber, bears N. and S.

38.00 Leave timber, bears N.30° W. and S.60° E.

40.05 Set a limestone, 16x9x4 ins., 11 ins. in the ground,
for $\frac{1}{4}$ sec. cor., marked $\frac{1}{2}$ on N. face; from which

A pinon pine, 8 ins. diam., bears N.45° E., 85
lks. dist., marked $\frac{1}{2}$ S.12, B.T.

No other trees within limits; raise a mound of stone,
2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.

Subdivision of T.12 S., R.14 E.-Continued.

Chains

Ascend along side of ridge.

67.00 Top of ridge, 50 ft. above $\frac{1}{2}$ sec. cor., bears N.E.
and S.W.

Descend .

80.10 The cor. of secs. 11, 12, 13, and 14.

Land, mountainous.

Soil, gravelly; 3rd rate.

Timber, pine and cedar.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, 80.10 chs.

N.0°01'W., bet. secs. 11 and 12.

Over mountainous land; through scattering timber and
scattering undergrowth.

Descend .

6.50 Begin abrupt descent, bears N.E. and S.W.

37.50 Bottom of hollow, 200 ft. below sec. cor., course N.E.

Ascend .

40.00 Set a limestone, 18x8x6 ins., 12 ins. in the ground, for
 $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which

A pinon pine, 16 ins. diam., bears E., 135 lks.
dist., marked $\frac{1}{2}$ S. 12, B.T.

A pinon pine, 14 ins. diam., bears W., 105 lks.
dist., marked $\frac{1}{2}$ S. 11, B.T.

48.00 Top of ridge, 100 ft. above hollow, bears E. and W.

Descend .

53.50 Bottom of hollow, 150 ft. below ridge, course S.E.

Ascend .

70.00 Top of ridge, 200 ft. above hollow, bears N.E. and S.W.

Descend .

80.00 Set a Limestone, 24x9x4 ins., 18 ins. in the ground,

Subdivision of T.12 S., R.14 E. -Continued.

Chains for cor. of secs. 1, 2, 11, and 12, marked with 5 notches on S. and 1 notch on E. edges; from which

- A pinon pine, 7 ins. diam., bears N. 23° E., 75 lks., dist., marked T.12 S., R.14 E., S.11, B.T.
- A red pine, 9 ins. diam., bears S. 32° E., 65 lks. dist., marked T.12 S., R.14 E., S.12, B.T.
- A pinon pine, 14 ins. diam., bears S. 64° W., 95 lks. dist., marked T.12 S., R.14 E., S.11, B.T.
- A pinon pine, 10 ins. diam., bears N. 22° W., 125 lks. dist., marked T.12 S., R.14 E., S.2, B.T.

Land, mountainous.

Soil, gravelly; 3rd rate.

Timber, pine and cedar.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous land, 80.00 chs.

August 22, 1902: At this cor. I set off 11° 56' N., on the decl. arc; and at 0 h 2 m p.m., l.m.t., observe the sun on the meridian, the resulting lat. is 39° 48' N.

S. 89° 55' E., on a random line bet. secs. 1 and 12.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

80.14 Intersect E. bdy. of Tp., 5 lks. N. of the cor. of secs. 1, 6, 7, and 12. heretofore described.

Thence I run

N. 89° 53' W., on a true line bet. secs. 1 and 12.

Over mountainous land, through heavy timber.

Descend .

23.00 Bottom of hollow, 400 ft. below sec. cor., course N. 30° E.

Ascend .

26.00 Top of ridge, 50 ft. above hollow, bears N.E. and S.W.

Subdivision of T.12 S., R.14 E. -Continued.

Chains

Descend .

28.50 Bottom of hollow, 100 ft. below ridge, course N. 60° E.

Ascend .

40.07 Set a sandstone, 22x8x4 ins., 16 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from whichA pinon pine, 14 ins. diam., bears N. 10° E., 50
lks. dist., marked $\frac{1}{4}$ S. 1, B. T.A pinon pine, 12 ins. diam., bears S. 20° E., 70
lks. dist., marked $\frac{1}{4}$ S. 12, B. T.

51.00 Sandstone ledge, 60 ft. high, bears N. 60° E. and S. 10° E.

68.00 Top of ridge, 400 ft. above hollow, bears N. 60° E. and
S. 60° W.:

Descend .

80.14 The cor. of secs. 1, 2, 11, and 12.

Land, mountainous.

Soil, gravelly and clay; 3rd rate.

Timber, pinon pine and cedar.

Good grass for grazing.

Mountainous land, or heavily timbered land, 80.14 chs.

N. 0° 01' W., on a random line bet. secs. 1 and 2.

40.00 Set temp. $\frac{1}{4}$ sec. cor.64.88 Intersect N. bdy. of Tp., at the cor. of secs. 1, 2, 35, and
36, heretofore described.

Thence 1 run

S. 0° 01' E., on a true line bet. secs. 1 and 2.

Over mountainous land; through scattering timber.

Ascend .

5.88 Top of ridge, 50 ft. above sec. cor., bears N. W. and S. E.

Descend .

24.88 Set a sandstone, 30x14x4 ins., 22 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; from which

A cedar, 8 ins. diam., bears N. 53° E., 58 lks.

Subdivision of T.12 S., R.14 E. -Continued.

Chains

dist., marked $\frac{1}{2}$ S.1, B.T.

A pinion pine, 10 ins. diam., bears N.59°W., 45

lks. dist., marked $\frac{1}{2}$ S.2, B.T.

Ascend along side of ridge.

44.00 Top of ridge, 50 ft. above $\frac{1}{2}$ sec. cor., bears N.30°E. and
S.30°W.

Descend .

64.00 Bottom of hollow, 200 ft. below ridge, course N.E.

Ascend .

64.88 The cor. of secs. 1, 2, 11, and 12,

Land, mountainous.

Soil, gravelly and clay; 3rd rate.

Timber, cedar and pine .

Good grass for grazing.

Mountainous land, 64.88 chs.

August 22, 1902.

August 23, 1902: At 7 h 3 m a.m., l.m.t., I set off
39°45'N., on the lat. arc; 11°41'N., on the decl. arc;
and determine a true meridian with the solar, at the
cor. of secs. 2, 3, 34, and 35, on S. bdy. of Tp., hereto-
fore described.

Thence I run

N.0°01'W., bet. secs. 34 and 35.

Over mountainous land; through heavy timber.

Ascend.

9.50 Top of ridge, 150 ft. above sec. cor., bears N.60°E. and
S.60°W.

Descend .

25.50 Bottom of Stone Cabin Canon, 600 ft. below ridge, course
N.75°E.

Ascend .

Subdivision of T.12 S., R.14 E. -Continued.

Chains

- 40.00 Set a limestone, 26x6x6 ins., 19 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which
- A pinon pine, 18 ins. diam., bears S. 20° E., 85 lks. dist., marked $\frac{1}{2}$ S. 35, B. T.
- A pinon pine, 8 ins. diam., bears N. 20° W., 50 lks. dist., marked $\frac{1}{2}$ S. 34, B. T.
- This cor. is 300 ft. above canon.
- .50.00 Top of ridge, 500 ft. above canon, bears E. and W.
- Descend .
- 62.50 Bottom of Hollow, 150 ft. below ridge, course E.
- Ascend .
- 80.00 Edge of timber, bears E. and W.
- Set a sandstone, 30x12x4 ins., 19 ins. in the ground, for cor. of secs. 26, 27, 34, and 35, marked with 1 notch on S. and 2 notches on E. edges; from which
- A pinon pine, 5 ins. diam., bears S. 30° E., 100 lks. dist., marked T.12 S., R.14 E., S. 35, B. T.
- A pinon pine, 8 ins. diam., bears S. 35° W., 120 lks. dist., marked T.12 S., R.14 E., S. 34, B. T.
- No other trees within limits; raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
- Land, mountainous.
- Soil, gravelly and clay; 3rd rate.
- Timber, cedar and pinon pine.
- Good grass for grazing.
- Mountainous or heavily timbered land, 80.00 chs.

East, on a random line bet. secs. 26 and 35.

- 40.00 Set temp. $\frac{1}{2}$ sec. cor.
- 80.02 Intersect N. and S. line, at the cor. of secs. 25, 26, 35, and 36.
- Thence I run

Subdivision of T.12 S., R.14 E. -Continued.

- Chains West, on a true line bet. secs. 26 and 35.
 Over mountainous land; through dense undergrowth.
 Descend .
- 38.00 Bottom of hollow, 200 ft. below sec. cor., course N.10°
 E.
 Ascend .
- 40.01 Set a sandstone, 24x6x6 ins., 18 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of
 stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impractica-
 ble.
- 71.00 Top of ridge, 160 ft. above hollow, bears N.W. and S.E.
 Descend .
- 80.02 The cor. of secs. 26, 27, 34, and 35.
 Land, mountainous.
 Soil, gravelly; 3rd rate.
 No timber.
 Undergrowth, deer brush and shadscales.
 Good grass for grazing.
 Mountainous land, or land covered with dense under-
 growth, 80.02 chs.

N.0°01'W., bet. secs. 26 and 27.

- Over mountainous land; through dense undergrowth.
 Ascend .
- 9.00 Top of ridge, 200 ft. above sec. cor., bears E. and W.
 Descend .
- 40.00 Set a limestone, 20x7x4 ins., 15 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; from which
 A pinon pine, 5 ins. diam., bears N.80°W., 65
 lks. dist., marked $\frac{1}{4}$ S.27, B.T.
 No other trees within limits; raise a mound of stone,
 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
 This cor. is 400 ft. below ridge.

Subdivision of T.12 S., R.14 E. -Continued.

Chains

46.50 Bottom of north fork of Stone, Cabin Canon, 500 ft. below ridge, course E. There is a small stream of water in canon at this point but it is almost dry. Ascend through heavy timber.

80.00 Set a limestone, 18x10x4 ins., 13 ins. in the ground, for cor. of secs. 22, 23, 26, and 27, marked with 2 notches on S. and 2 notches on E. edges; from which

A pinon pine, 6 ins. diam., bears N. 10° E., 100 lks. dist., marked T. 12 S., R. 14 E., S. 23, B. T.

A cedar, 18 ins. diam., bears S. 15° E., 55 lks. Dist., marked T. 12 S., R. 14 E., S. 26, B. T.

A pinon pine, 10 ins. diam., bears S. 40° E., 160 lks. dist., marked T. 12 S., R. 14 E., S. 27, B. T.

A pinon pine, 16 ins. diam., bears N. 45° W., 180 lks. dist., marked T. 12 S., R. 14 E., S. 22, B. T.

Land, mountainous.

Soil, gravelly; 3rd rate.

Timber, cedar and pinon pine.

Undergrowth, sage and deer brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

August 23, 1902: At this cor. I set off 11° 35' N., on the lat. arc; and at 0 h 2 m p.m., l.m.t., observe the sun on the meridian, the resulting lat. is 39° 45' N.

East, on a random line bet. secs. 23 and 26.

40.00 Set temp. 2 sec. cor.

79.94 Intersect N. and S. line, 19 N. of the cor. of secs. 23, 24, 25, and 26.

Thence I run

N. 89° 52' W., on a true line bet. secs. 23 and 26.

Over mountainous land; through heavy timber.

Subdivision of T.12 S., R.14 E. -Continued.

Chains

- Ascend .
- 28.00 Top of ridge, 150 ft. above sec. cor., bears N. and S.
- Descend .
- 39.97 Set a sandstone, 30x8x6 ins., 22 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; from which
- A pinon pine, 8 ins. diam., bears N. 48° E., 65 lks. dist., marked $\frac{1}{2}$ S. 23, B. T.
- A pinon pine, 8 ins. diam., bears S. 40° E., 80 lks. dist., marked $\frac{1}{2}$ S. 26, B. T.
- 41.00 Bottom of hollow, 85 ft. below ridge, course S.
- Ascend .
- 50.00 Top of ridge, 500 ft. above hollow, bears N. and S.
- Descend .
- 67.50 Bottom of hollow, 75 ft. below ridge, course S.
- Ascend .
- 73.50 Top of ridge, 30 ft. above hollow, bears N. and S.
- Descend .
- 79.94 The cor. of secs. 22, 23, 26, and 27.
- Land, mountainous.
- Soil, gravelly; 3rd rate.
- Timber, cedar and pinon pine.
- Good grass for grazing.
- Mountainous or heavily timbered land, 79.94 chs.
-
- N. 0° 01' W., bet. secs. 22 and 23.
- Over mountainous land; through heavy timber.
- Ascend .
- 40.00 Leave timber, bears E. and W.
- Set a sandstone, 20x8x4 ins., 15 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which
- A pinon pine, 12 ins. diam., bears N. 85° E., 100 lks. dist., marked $\frac{1}{2}$ S. 23, B. T.
- A pinon pine, 12 ins. diam., bears S. 80° W., 90

Subdivision of T.12 S., R.14 E. -Continued.

Chains

lks. dist., marked $\frac{1}{2}$ S. 22, B. T.

42.00 Top of divide ridge, 250 ft. above sec. cor., bears N. E.
and S. W.

Descend through scattering undergrowth.

80.00 Set a sandstone, 20x10x5 ins., 15 ins. in the ground, for
cor. of secs. 14, 15, 22, and 23, marked with 3 notches
on S. and 2 notches on E. edges; and raise a mound of
stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impractic-
able.

Land, mountainous.

Soil, gravelly and white clay; 3rd rate.

Timber, cedar and pinon pine.

Undergrowth, deer brush.

Good grass for grazing.

Mountainous or heavily timbered land, 80.00 chs.

S. 89° 52' E., on a random line bet. secs. 14 and 23.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

79.74 Intersect N. and S. line, 10 lks. N. of the cor. of secs.
13, 14, 23, and 24.

Thence I run

N. 89° 48' W. on a true line bet. secs. 14 and 23.

Over mountainous land; through heavy timber.

Ascend.

19.00 Top of ridge, 100 ft. above sec. cor., bears N. 30° E.
and S. 30° W.

Descend.

36.50 Bottom of Hollow, 40 ft. below ridge, course N. E.

Ascend. Leave timber, bears with ridge.

39.87 Set a sandstone, 20x12x4 ins., 15 ins. in the ground, for
sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of
stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impractic-
able.

Subdivision of T.12 S., R.14 E. -Continued.

Chains

53.00 Top of divide ridge, 150 ft. above hollow, bears N. 30°
E. and S. 30° W.

Descend .

79.74 The cor. of secs. 14, 15, 22, and 23.

Land, mountainous.

Soil, gravelly and white clay; 3rd rate.

Timber, cedar and pinon pine.

Good grass for grazing.

Mountainous or heavily timbered land, 79.74 chs.

August 23, 1902.

August 24, 1902: At 7 h 2 m a.m., l.m.t., I set off
39° 46' N., on the lat. arc; 11° 20' N., on the decl. arc;
and determine a true meridian, with the solar, at the
cor. of secs. 14, 15, 22, and 23.

Thence I run

N. 0° 01' W., bet. secs. 14 and 15.

Over mountainous land; through scattering undergrowth.

Descend .

20.50 Bottom of hollow, 20 ft. below sec. cor., course N.W.

Ascend .

35.00 Top of ascent, 150 ft. above hollow, bears N. 80° W.

and S. 80° E. Thence Over mesa. Enter heavy timber.

40.00 Set a sandstone, 32x10x4 ins., 22 ins. in the ground, for
¼ sec. cor., marked ¼ on W. face; from which

A pinon pine, 8 ins. diam., bears N. 70° E., 65
lks. dist., marked ¼ S. 14, B.T.

A pinon pine, 14 ins. diam., bears S. 80° W., 68
lks. dist., marked ¼ S. 15, B.T.

45.00 Leave timber and enter dense undergrowth, bears
E. and W.

80.00 Set a sandstone, 18x12x4 ins., 12 ins. in the ground,
for cor. of secs. 10, 11, 14, and 15, marked with 4

 Subdivision of T.12 S., R.14 E.-Continued.

Chains notches on S. and 2 notches on E. edges; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, mountainous and mesa.

Soil, gravelly and clay; 3rd rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

S. $89^{\circ}48'E.$, on a random line bet. secs. 11 and 14.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.92 Intersect N. and S. line, 7 lks. S. of the cor. of secs. 11, 12, 13, and 14.

Thence I run

N. $89^{\circ}51'W.$, on a true line bet. secs. 11 and 14.

Over mountainous land; through scattering timber.

Descend gradually.

22.00 Leave timber, bears N.W. and S. and enter sage brush.

30.96 Set a sandstone, 14x12x4 ins., 9 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from which

A cedar, 7 ins. diam., bears N. $80^{\circ}W.$, 275 lks.

dist., marked $\frac{1}{4}$ S. 11, B.T.

A cedar, 5 ins. diam., bears S. $63^{\circ}W.$, 225 lks.

dist., marked $\frac{1}{4}$ S. 14, B.T.

41.50 Enter scattering timber, bears N.E. and S.W.

50.50 Descend abruptly, bears N.E. and S.W.

57.00 Bottom of hollow, 100 ft. below $\frac{1}{4}$ sec. cor., course N. $10^{\circ}E.$

Ascend .

61.00 Top of ascent, edge of mesa, bears N. $15^{\circ}W.$ and S. $15^{\circ}E.$

Thence over mesa through heavy timber.

79.92 The cor. of secs. 10, 11, 14, and 15.

Subdivision of T.12 S., R.14 E., -Continued.

- Chains Land, mountainous and level mesa.
 Soil, gravelly and white clay; 3rd rate..
 Timber, cedar and pinon pine.
 Good grass for grazing.
 Mountainous or heavily timbered land, 79.92 chs.
-
- N.0°01'W., bet. secs. 10 and 11.
 Over rolling mesa; through scattering timber and
 dense sage brush.
- 9.00 Leave mesa, bears E. and W.; descend .
- 10.00 Enter heavy timber and leave undergrowth, bears E. and
 W.
- 16.00 Bottom of hollow, 150 ft. below mesa, course N.W.
 Ascend .
- 23.00 Top of ridge, 75 ft. above hollow, bears N.60°W. and
 S.60°E.
 Descend .
- 40.00 Set a sandstone, 18x12x4 ins., 12 ins. in the ground,
 for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; from which
 A red pine, 9 ins. diam., bears N.80°E., 48
 lks. dist., marked $\frac{1}{4}$ S.11, B.T.
 A red pine 9 ins. diam., bears N.85°W., 22 lks.
 dist., marked $\frac{1}{4}$ S.10, B.T.
- 48.50 Bottom of hollow, 300 ft. below ridge, course N.W.
 Ascend .
- 50.00 Leave timber, bears N.W. and S.E.
- 80.00 Set a sandstone, 24x10x4 ins., 18 ins. in the ground, for
 cor. of secs. 2, 3, 10, and 11, marked with 5 notches on
 S. and 2 notches on E. edges; and raise a mound of
 stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impractic-
 able.
 Land, mountainous and rolling mesa.
 Timber, cedar and pinon pine.
 Soil, gravelly and clay; 3rd rate.

Subdivision of T.12 S., R.14 E.-Continued.

Chains Undergrowth, sage brush.
 Good grass for grazing.
 Mountainous or heavily timbered land, or land covered
 with dense undergrowth, 80.00 chs.
 August 24, 1902: At the noon hour the sky is overcast
 and solar observations are impossible.

S.89°51'E., on a random line bet. secs. 2 and 11.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

80.04 Intersect N. and S. line, 10 lks. S. of the cor. of secs.
 1, 2, 11, and 12.

Thence I run

N.89°55'W., on a true line bet. secs. 2 and 11.

Over mountainous land; through dense undergrowth.

Descend .

.60 Bottom of hollow, course N.E.

Ascend .

6.00 Top of ascent, edge of mesa, bears N. and S.E.; thence
 over mesa.

6.50 Enter scattering timber., bears N. and S.

26.00 Leave mesa, bears N. and S. Descend .

40.02 Set a limestone, 18x10x4 ins., 12 ins. in the ground, for
 $\frac{1}{2}$ sec. cor., marked with $\frac{1}{2}$ on N. face; from which

A pinon pine, 12 ins. diam., bears N.11°E., 40

lks. dist., marked $\frac{1}{2}$ S. 2, B.T.

A pinon pine, 7 ins. diam., bears S.3°E., 110

lks. dist., marked $\frac{1}{2}$ S. 11, B.T.

44.00 Bottom of hollow, 150 ft. below mesa, course N.30°W.

Ascend .

58.50 Top of ridge, 150 ft. above hollow, bears N.W. and S.E.

Descend .

80.04 The cor. of secs. 2, 3, 10, and 11.

Land, mountainous and mesa.

Subdivision of T.12 S., R.14 E. -Continued.

Chains Soil, gravelly and clay; 3rd rate.

Timber, cedar and pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth, 80.04 chs.

Note: Knowing from connections already made that this line will not close on the north boundary within limits I run

N.0°01'W., on a true line bet. secs. 2 and 3.

Over mountainous land; through scattering timber.

Ascend .

12.00 Top of ridge, 100 ft. above sec. cor., bears N.20°W. and S.E.

Descend along side of spur.

40.00 Top of same spur, bears N.20°E. and S.20°W.

Set a limestone, 18x11x4 ins., 12 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which

A cedar, 5 ins. diam., bears N.25°E., 40 lks. dist., marked $\frac{1}{2}$ S. 2, B.T.

A cedar, 9 ins. diam., bears S.80°W., 28 lks. dist., marked $\frac{1}{2}$ S. 3, B.T.

64.86 Intersect N. bdy. of Tp., 28.20 chs. East of the cor. of secs. 2, 3, 34, and 35, heretofore described.

Set a limestone, 18x10x4 ins., 12 ins. in the ground, for closing cor. of secs. 2 and 3, marked C.C. on S., with 2 grooves on E. and 4 grooves on W. faces; from which

A pinon pine, 5 ins. diam., bears S.35°E., 60 lks. dist., marked T.12 S., R.14 E., S.2, B.T.

A pinon pine, 8 ins. diam., bears S.50°W., 85 lks. dist., marked T.12 S., R.14 E., S.3, B.T.

Subdivision of T.12 S., R.14 E.-Continued.

Chains

Note: I destroy all marks on the cor. of secs. 2, 3, 34, and 35, which pertain to secs. 2 and 3.

Land, mountainous.

Soil, gravelly and rocky; 3rd and 4th rate.

Timber, cedar and pine.

Mountainous land, 64.56 chs.

August 24, 1902.

August 25, 1902: At 7 h 2 m a.m., l.m.t., I set off $39^{\circ}43'N.$, on the lat. arc; $11^{\circ}0'N.$, on the decl. arc; and determine a true meridian, with the solar, at the cor. of secs. 3, 4, 33, and 34, on S. bdy. of Tp., heretofore described.

Thence I run

$N.0^{\circ}02'W.$, bet. secs. 33 and 34.

Over mountainous land; through aspen timber;

Descend .

.70 Creek, 2 lks. wide, 2 ins. deep, in bottom of Stone Cabin Canon, course E.

Ascend .

3.50 Spring branch, 2 lks. wide, 3 ins. deep, in hollow, course S.E.

Ascend .

9.00 Leave aspen timber, bears N.E. and S.W.

10.00 A spring of good water bears west 150 lks. dist..

40.00 Set a limestone, 18x10x4 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

52.00 Top of ridge, 674 ft. above canon, bears $N.80^{\circ}W.$ and

Subdivision of T.12 S., R.14 E. -Continued.

Chains S.80°E.

Descend .

62.50 A small spring of water bears west about 8.00 chs.
dist.

80.00 Set a sandstone, 18x12x5 ins., 12 ins. in the ground, 6
for cor. of secs. 27, 28, 33, and 34, marked with 1 notch
on S. and 3 notches on E. edges; and raise a mound of
stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impractic-
able.

Land, mountainous.

Soil, gravelly loam; 2nd rate.

Timber, aspen.

Good grass for grazing.

Mountainous land, 80.00 chs.

East, on a random line bet. secs. 27 and 34.

40.00 Set temp. ¼ sec. cor.

79.84 Intersect N. and S. line, 15 lks. N., of the cor. of secs
26, 27, 34, and 35.

Thence I run

N.89°54'W., on a true line bet. secs. 27 and 34.

Over mountainous land; through scattering timber.

Descend .

21.00 Leave timber, bears N. and S.

27.00 Bottom of hollow, 100 ft. below sec. cor., course S.
Ascend .

39.92 Set a sandstone, 26x12x4 ins., 18 ins. in the ground,
for ¼ sec. cor., marked ¼ on N. face; and raise a mound
of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits imprac-
ticable.

44.00 Top of ridge, 50 ft. above hollow, bears N.E. and S.W.
Descend .

60.00 Bottom of hollow, 50 ft. below ridge, course N.
Ascend .

Subdivision of T.12 S., R.14 E. -Continued.

Chains

68.00 Top of ridge, 70 ft. above hollow, bears N. and S.

Descend .

79.84 The cor. of secs. 27, 28, 33, and 34.

Land, mountainous.

Soil, gravelly loam; 2nd rate.

Timber, cedar and pinon pine.

Good grass for grazing.

Mountainous land, 79.84 chs.

N. 0° 02' W., bet. secs. 27 and 28.

Over mountainous land; through scattering timber.

Descend .

18.00 Bottom of hollow, 50 ft. below sec. cor., course N.E..

Ascend . Creek, 2 lks. wide, 1 in. deep in bottom.

28.50 Top of ridge, 50 ft. above hollow, bears N. 30° E. and
S. 30° W.

Descend .

34.50 Bottom of north fork of Stone Cabin Canon, 500 ft.
below ridge, course E.

Ascend .

40.00 Set a sandstone, 18x8x5 ins., 12 ins. in the ground,
for $\frac{1}{4}$ sec. cor., marked $\frac{1}{2}$ on E. face; from which

A pinon pine, 30 ins. diam., bears N. 86° E.,
25 lks. dist., marked $\frac{1}{4}$ S. 27, B. T.

A pinon pine, 10 ins. diam., bears N. 80° W., 70
lks. dist., marked $\frac{1}{4}$ S. 28, B. T.

70.00 Top of divide ridge, 500 ft. above canon, bears E.
and W.

Descend .

80.00 Set a sandstone, 30x8x4 ins., 22 ins. in the ground, for
cor. of secs. 27, 28, 21, and 22, marked with 2 notches on
S. and 3 notches on E. edges; and raise a mound of
stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impractic-

Subdivision of T.12 S., R.14 E. -Continued.

Chains able.

Land, mountainous .

Soil, gravelly loam; 2nd rate.

Timber, cedar and pinon pine.

Undergrowth, sage and deer brush.

Good grass for grazing.

Mountainous land, 80.00 chs.

August 25, 1902.: At the noon hour the sky is overcast and solar observations are impossible .

S. 89° 54' E., on a random line bet. secs. 22 and 27.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

79.70 Intersect N. and S. line, 23 lks. S. of the cor. of secs. 22, 23, 26, and 27.

Thence I run

S. 89° 56' W., on a true line bet. secs. 22 and 27.

Over mountainous land; through heavy timber; descend .

3.00 Bottom of hollow, 150 ft. below sec. cor., course S.

Ascend .

10.00 Top of ridge, 150 ft. above hollow, bears N. and S.

Descend .

21.00 Leave timber, bears N. and S.

22.00 Bottom of hollow, 200 ft. below ridge, course S.

Ascend .

39.85 Top of ridge, 250 ft. above hollow, bears N. and S.

Set a sandstone, 20x12x4 ins., 15 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from which

A pinon pine, 8 ins. diam., bears N. 15° E., 280 lks. dist., marked $\frac{1}{4}$ S. 22, B.T.

A pinon pine, 12 ins. diam., bears S. 10° W., 165 lks. dist., marked $\frac{1}{4}$ S. 27, B.T.

Enter scattering timber, bears N. E. and S. W.

Descend .

52.00 Bottom of hollow, 150 ft. below ridge, course S. 20° E.

Subdivision of T.12 S., R.14 E. -Continued.

Chains Ascend .

68.00 Top of divide ridge, 100 ft above hollow, bears N. 60° E.
and S. 60° W.

Descend .

79.70 The cor. of secs. 21, 22, 27, and 28.

Land, mountainous.

Soil, gravelly loam ; 2nd rate.

Timber, cedar and pinon pine.

Good grass for grazing.

Mountainous land, or heavily timbered land, 79.70 chs.

N. 0° 02' W., bet. secs. 21 and 22.

Over mountainous land; through scattering undergrowth.

Descend .

40.00 Set a sandstone, 24x10x5 ins., 18 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., marked $\frac{1}{2}$ on W. face; and raise a mound of
stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impractic-
able.

40.10 Bottom of hollow, 250 ft. below ridge, course N. 10° E.

Ascend .

45.00 Top of ridge, 20 ft. above hollow, bears N. 20° E. and
S. 20° W.

Descend .

54.00 Bottom of hollow, 50 ft. below ridge, course N. 30° E.

Ascend .

57.00 Enter timber, bears E. and W.

70.00 Top of ridge, 60 ft. above hollow, bears N. 60° E. and S.
60° W.

Descend .

80.00 Set a sandstone, 18x10x6 ins., 12 ins. in the ground, for
cor. of secs. 15, 16, 21, and 22, marked with 12 S. on N. E.
and 14 E. on S. E., faces; with 3 notches on S. and 3 not-
ches on E. edges; from which

A cedar, 12 ins. diam., bears N. 20° E., 265 lbs.

Subdivision of T.12 S., R.14 E. -Continued.

Chains dist., marked T.12 S., R.14 E., S.15, B.T.
 A cedar, 6 ins. diam., bears S.40° E., 125 lks.
 dist., marked T.12 S., R.14 E., S.22, B.T.
 A cedar, 6 ins. diam., bears S.10° W., 97 lks.
 dist., marked T.12 S., R.14 E., S.21, B.T.

No other trees within limits; raise a mound of stone,
 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.

Land, mountainous .

Soil, gravelly; 3rd rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, 80.00 chs.

August 25, 1902: At this cor. I set off 39° 46' N., on the
 lat. arc; 10° 52' N., on the decl. arc; and at 4 h 2 m p.m.,
 l.m.t., determine a true meridian, with the solar and
 mark a point thereof on a stone, firmly set in the ground
 5.00 chs. N. of the cor.

At 9 h 14 p.m., l.m.t., I observe Polaris at east-
 ern elongation, in accordance with the Manual, and
 mark a point in the line thus determined, by a tack
 driven in a wooden plug set in the ground, 5.00 chs.
 N. of the cor.

August 25, 1902.

August 26, 1902: At 6 h 35 m a.m., l.m.t., I lay off the
 azimuth of Polaris 1° 34.8' to the west, and mark a
 point in the true meridian, thus determined by cutting
 a small groove in the stone, already set 5.00 chs.
 N. of the cor.; this mark falls 0.30 ins. east of the
 true meridian determined with the solar.

At 7 h 3 m a.m., l.m.t., I set off 39° 46' N., on the

Subdivision of T. 12 S., R. 14 E. -Continued.

Chains lat. arc; $10^{\circ}39'N.$, on the decl. arc; and mark a point in the true meridian determined with the solar, by a cross on the stone already set 5.00 chs. N. of the cor.; this mark falls 0.35 ins. east of the true meridian established by Polaris observation.

The solar apparatus by p.m. and a.m. observations defines positions for true meridians, respectively about $0'16''$ west and $0'18''$ east of the true meridian determined by Polaris observation; therefore I conclude that the adjustments of the instruments are satisfactory.

The magnetic bearing of the true meridian, at 7 h 30 'a.m. is $16^{\circ}16'W.$, the angle thus determined reduced by the table page 100 of the Manual, gives the mean mag. decl. $16^{\circ}10'E.$

Thence I run

$N.89^{\circ}56'E.$, on a random line bet. secs. 15 and 22.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.68 Intersect N. and S. line, at the cor. of secs. 14, 15, 22, and 23.

Thence I run

$S.89^{\circ}56'W.$, on a true line bet. secs. 15 and 22.

Over mountainous land; through scattering undergrowth.

Descend .

25.00 Enter heavy timber, bears N. and S.

27.00 Descend abruptly over ledges.

34.00 Bottom of hollow, 250 ft. below sec. cor., course N.

Ascend through scattering timber

39.84 Set a sandstone, $19 \times 10 \times 4$ ins., 12 ins. in the ground,

for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

Subdivision of T.12 S., R.14 E. -Continued.

Chains

- 51.00 Top of ridge, 250 ft. above hollow, bears N. and S.
Descend .
- 68.40 Bottom of canon, 300 ft. below ridge, course N. There
is a small spring 3.00 chs. N and one 3.00 chs. S.
of this point.
Ascend .
- 79.68 The cor. of secs. 15, 16, 21, and 22.
Land, mountainous.
Soil, gravelly; 3rd rate.
Timber, cedar and pinon pine.
Undergrowth, sage brush.
Good grass for grazing.
Mountainous or heavily timbered land, 79.68 chs.
-
- N. 0° 02' W., bet. secs. 15 and 16.
Over mountainous land; through dense undergrowth
and scattering timber.
Descend .
- 25.00 Bottom of hollow, 100 ft. below sec. cor., course E.
Ascend .
- 31.25 Enter heavy timber, bears E. and W.
- 40.00 Set a sandstone, 18x10x7 ins., 12 ins. in the ground,
for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; from which
A pinon pine, 5 ins. diam., bears S. 47° E., 30
= lks. dist., marked $\frac{1}{4}$ S. 15, B.T.
A pinon pine, 10 ins. diam., bears S. 84° W., 22
lks. dist., marked $\frac{1}{4}$ S. 16, B.T.
- 73.00 Top of ridge, 200 ft. above hollow, bears E. and W.
Descend .
- 80.00 Set a sandstone, 18x12x4 ins., 12 ins. in the ground, for
cor. of secs. 9, 10, 15, and 16, marked with 4 notches on
S. and 3 notches on E. edges; from which
A cedar, 8 ins. diam., bears N. 35° E., 120 lks.

Subdivision of T.12 S., R.14 E. -Continued.

Chains

dist., marked T.12 S., R.14 E., S.10, B.T.

A pinon pine, 12 ins. diam., bears S.87°E., 70

lks. dist., marked T.12 S., R.14 E., S.15, B.T.

A pinon pine, 18 ins. diam., bears S.63°W., 87

lks. dist., marked T.12 S., R.14 E., S.16, B.T.

A cedar, 5 ins. diam., bears N.35°W., 68 lks.

dist., marked T.12 S., R.14 E., S.9, B.T.

Land, mountainous .

Soil, gravelly; 3rd rate.

Timber, cedar and pinon pine.

Undergrowth, sage and deer brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered
with dense undergrowth, 80.00 chs.

N.89°53'E., on a random line bet. secs. 10 and 15.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.72 Intersect N. and S. line at the cor. of secs. 10, 11, 14,
and 15.

Thence I run

S.80°56'W., on a true line bet. secs. 10 and 15.

Over mesa; through heavy timber .

10.00 Edge of mesa, bears N. and S. Descend .

35.00 Bottom of hollow, 400 ft. below mesa, course N.25°W.

There is a small spring up this hollow about 25.00
chs. (not seen from line).

Ascend .

39.86 Set a sandstone, 24x10x5 ins., 18 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from which

A pinon pine, 10 ins. diam. bears N.30°W., 125

lks. dist., marked $\frac{1}{4}$ S.10, B.T.

A cedar, 8 ins. diam., bears S. 125 lks. dist.,

marked $\frac{1}{4}$ S.15, B.T.

45.00 Top of ridge, 150 ft. above hollow, bears N.35°W. and

Subdivision of T.12 S., R.14 E. -Continued.

Chains S.35° E.

Descend .

52.00 Bottom of Canon, 200 ft. below ridge, course N.15° E.

Ascend .

79.72 Cor. of secs. 9, 10, 15, and 16,

Land, mountainous, and mesa.

Timber, pine and cedar.

Undergrowth, sage brush.

Soil, gravelly ; 3rd rate.

Good grass for grazing.

Mountainous or heavily timbered land, 79.72 chs.

August 26, 1902: At the noon hour the sky is overcast and solar observations are impossible.

N.0°02'W., bet. secs. 9 and 10.

Note: In order to avoid making section 10 fractional I run this line north 80.00 chs.

Over mountainous land; through heavy timber:

Descend .

7.00 Swale , 50 ft. below sec. cor., course E.

Ascend .

19.00 Top of ridge, 120 ft. above hollow, bears E. and W.

Descend .

35.50 Head of hollow, 200 ft. below ridge, course N.E.

Ascend .

39.00 Top of ridge, 100 ft. above hollow, bears N.E. and S.W.

Descend .

40.00 Set a sandstone, 20x20x5 ins., 15 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; from which

A pinon pine, 14 ins. diam., bears N.65° E., 37

lks. dist., marked $\frac{1}{4}$ S.10, B.T.

A pinon pine, 8 ins. diam., bears W., 28 lks.

dist., marked $\frac{1}{4}$ S.9, B.T.

58.00 Bottom of hollow, 250 ft. below ridge, course W.

Subdivision of T.12 S., R.14 E.-Continued.

Chains

Ascend .

65.00 Top of ridge, 200 ft. above hollow, bears E. and W.

Descend .

- 80.00 Set a sandstone, 16x9x6 ins., 11 ins. in the ground, for N.E. cor. of sec. 9 and N.W. cor. sec. 10, marked with 3 notches on E. and 5 notches on S. edges; from which
- A red pine, 13 ins. diam., bears S. 20° E.,
140 lks. dist., marked T.12 S., R.14 E., S.10, B.T.
- No other trees within limits; raise a mound of stone, 2 ft. base, 1½ ft. high, S. of cor. Pits impracticable.
- Land, mountainous .
- Soil, gravelly and white clay; 3rd rate.
- Timber, cedar and pinon pine.
- Good grass for grazing.
- Mountainous or heavily timbered land, 80.00 chs.

N. 88° 56' E., on a random line bet. secs. 3 and 10.

- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 79.84 Intersect N. and S. line, 10 lks. N. of the cor. of secs. 2, 3, 10, and 11.

Thence I run

West, on a true line bet. secs. 3 and 10.

Over mountainous land, through heavy timber.

Descend .

- 29.00 Bottom of hollow, 700 ft. below sec. cor., course N.
- There is a small spring 8.00 chs. S. of line.

Ascend .

- 39.92 Set a sandstone, 20x12x6 ins., 15 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from which
- A pinon pine, 5 ins. diam., bears N. 29° W., 120 lks. dist., marked $\frac{1}{4}$ S. 3, B.T.
- A red pine, 11 ins. diam., bears S. 14° W., 205 lks. dist., marked $\frac{1}{4}$ S. 10, B.T.

Subdivision of T.12 S., R.14 E. -Continued.

Chains

- 49.50 Top of ridge, 600 ft. above hollow, bears N. and S.
Descend .
- 62.00 Bottom of hollow, 300 ft. below ridge, course N. 15° W.
Ascend .
- 79.84 The cor. of secs. 9 and 10.
Land, mountainous.
Soil, gravelly and white clay; 3rd rate.
Timber, cedar and pine .
Good grass for grazing.
Mountainous or heavily timbered land, 79.84 chs.

Note: In order to properly close on the S.E. cor. of sec. 4, and knowing from previous connections that a line west from this corner will not intersect within limits; therefore I run

- West, on a true line bet. secs. 3 and 9.
Over mountainous land; through scattering timber .
Ascend .
- 4.00 Top of ridge, 100 ft. above sec. cor., bears N. and S.
Descend abruptly.
- 7.00 Bottom of hollow, 100 ft. below ridge, course N.
Ascend .
- 28.30 Intersect E. bdy. of Section 4, 15.62 chs. N. ^{0°18' W.} of South East corner of section 4, which is a sandstone, 6x10x7 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general.
Note: I destroy all marks on this cor. which pertain to secs. 3, 9, and 10, and remark it for the South east corner of section 4, from which
a pinon pine, 10 ins. diam., bears N. 13° W., 33 lks. dist., marked T.12 S., R.14 E., S. 4, B.T.
At my intersection with E. side of sec. 4, 15.62 chs. ^{N. 0°18' W.} of the S.E. cor. of sec. 4,

Subdivision of T.12 S., R.14 E., Continued.

Chains

Set a sandstone, 24x10x10 ins., 18 ins. in the ground,
for the South West cor. of section 3, marked with
3 notches on E. edge; from which

A pinon pine, 10 ins. diam., bears N. E., 55
lks. dist., marked T.12 S., R.14 E., S.3, B.T.

Land, mountainous.

Soil, gravelly and white clay; 3rd rate.

Timber, cedar and pinon pine.

Good grass for grazing.

Mountainous land, 28.30 chs.

August 26, 1902.

August 27, 1902. At 7 h 5 m a.m., l.m.t., I set off
39° 43' N., on the lat. arc; 10° 18' N., on the decl. arc;
and determine a true meridian, with the solar, at the
cor. of secs. 4, 5, 32, and 33, on S. bdy. of Tp., hereto-
fore described.

Thence I run

North 0° 03' W., bet. secs. 32 and 33.

Over mountainous land; through dense sage brush.

Ascend .

16.50 Top of ridge, 40 ft. above sec. cor., bears N. 40° E. and
S. 40° W.

Descend.

40.00 Set a sandstone, 24x10x4 ins., 18 ins. in the ground,
for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; and raise a
mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits
impracticable.

48.00 Enter aspen timber, bears E. and W.

57.70 Bottom of hollow, 300 ft. below ridge, course N. E.

Ascend .

Subdivision of T.12 S., R.14 E. -Continued.

Chains

- 63.00 Leave timber, bears N.E. and S.W.
- 64.60 Top of ridge, 50 ft. above hollow, bears N.E. and S.W.
Descend .
- 72.00 Bottom of hollow, 80 ft. below ridge, course N.80°E.
Ascend .
- 73.90 Enter heavy timber, bears N.E. and S.W.
- 80.00 Set a sandstone, 24x12x4 ins., 18 ins. in the ground,
for cor. of secs. 28, 29, 32, and 33, marked with 1 notch
on S. and 4 notches on E. edges; from which
- A pinon pine, 12 ins. diam., bears S.85°E., 200
lks. dist., marked T.12 S., R.14 E., S.33, B.T.
- A pinon pine, 10 ins. diam., bears S.45°W., 65
lks. dist., marked T.12 S., R.14 E., S.32, B.T.
- A pinon pine, 5 ins. diam., bears N.65°W., 18
lks. dist., marked T.12 S., R.14 E., S.29, B.T.
- No other tree within limits; raise a mound of stone,
2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
Land, mountainous.
Soil, sandy and clay loam and gravelly; 2nd and 3rd
rate.
Timber, pine and aspen and cedar.
Undergrowth, sage and deer brush.
Good grass for grazing.
Mountainous or heavily timbered land, or land covered
with dense undergrowth, 80.00 chs.

East, on a random line bet. secs. 28 and 33.

- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 79.84 Intersect N. and S. line, at the cor. of secs. 27, 28, 33,
and 34.

Thence I run

West, on a true line bet. secs. 28 and 33.

Over mountainous land; through dense undergrowth
and scattering timber.

Descend .

Subdivision of T.12 S., R.14 E.-Continued.

Chains

- 9.75 Bottom of hollow, 50 ft. below sec. cor., course N. 30° E.
Ascend .
- 22.00 Top of ridge, 50 ft. above hollow, bears N. 30° E. and S. 30° W.
Descend .
- 39.92 Set a sandstone, 24x12x5 ins., 18 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
- 43.50 Bottom of hollow, 150 ft. below ridge, course N. 20° E.
Ascend .
- 47.50 Top of ridge, 40 ft. above hollow, bears N. 20° E. and S. 20° W.
Descend .
- 53.00 Enter aspen timber, bears N. and S.
- 60.00 Bottom of canon, 300 ft. below ridge, course N. 80° E. Creek, 2 lks. wide, 2 ins. deep, in bottom.
Ascend ..
- 61.00 Leave timber, bears N. 80° E. and S. 80° W.
- 70.00 Enter pine timber, bears N. E. and S. W.
- 79.84 The cor. of secs. 28, 29, 32, and 33.
Land, mountainous.
Soil, gravelly; 3rd rate.
Timber, pine and cedar and aspen.
Undergrowth, sage brush.
Good grass for grazing.
Mountainous or heavily timbered land, or land covered with dense undergrowth, 79.84 chs.

N. 0° 03' W., bet. secs. 28 and 29.

Over mountainous land; through scattering timber.
Ascend .

Subdivision of T.12 S., R.14 E. -Continued.

Chains

- 1.50 Top of ridge, 150 ft. above sec. cor., bears N. 80° E. and S. 80° W.
Descend.
- 31.50 Enter aspen timber, bears E. and W.
- 32.50 Bottom of north fork of Stone, Cabin Canon, 100 ft. below ridge, course to ascend.
- 33.50 Leave aspen timber, bears E. and W.
- 40.00 Set a sandstone, 18x10x4 ins. in 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
- 48.00 Top of ridge, 150 ft. above hollow, bears N. 80° E. and S. 80° W. (DIVIDE).
Descend.
- 80.00 Set a limestone, 18x10x4 ins., 12 ins. in the ground, for cor. of secs. 20, 21, 28, and 29, marked with 2 notches on S. and 4 notches on E. edges; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
Land, mountainous.
Soil, gravelly; 3rd rate.
Timber, cedar and pine.
Undergrowth, sage and deer brush.
Good grass for grazing.
Mountainous land, 80.00 chs.
August 27, 1902.: At the noon hour the sky is overcast and solar observations are impossible.

East on a random line bet. secs. 21 and 28.

- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 79.00 Intersect N. and S. line, at the cor. of secs. 21, 22, 27, and 28.
Thence I run

Subdivision of T.12 S., R.14 E./Continued.

Chains

West, on a true line bet. secs. 21 and 28.

Over mountainous land; through scattering undergrowth.

Ascend .

10.00 Top of ridge, 100 ft. above sec. cor., bears N. and S.

Descend .

39.95 Set a sandstone, 18x10x8 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

— 79.90 The cor. of secs. 20, 21, 28, and 29.

Land, mountainous.

Soil, sandy and white clay loam and gravelly; 2nd and 3rd rate.

No timber.

Undergrowth, sage and deer brush.

Good grass for grazing.

Mountainous land, 79.90 chs.

N. 0° 03' W., bet. secs. 20 and 21 .

Over mountainous land; through dense undergrowth.

Descend .

40.00 Set a sandstone, 18x10x4 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

50.00 Trail, bears N. 80° W. and S. 80° E.

50.50 Bottom of hollow, 110 ft. below sec. cor., course N. 80° W.

Ascend .

58.00 Enter heavy timber, bears E. and W.

65.00 Top of ridge, 100 ft. above hollow, bears N. 80° W. and S. 80° E.

Descend .

— 80.00 Set a sandstone, 20x12x5 ins., 15 ins. in the ground,

Subdivision of T.12 S., R.14 E. -Continued.

Chains for cor. of secs. 16, 17, 20, and 21, marked with 3 notches on S. and 4 notches on E. edges; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, mountainous .

Soil, clay and gravelly; 3rd rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush and deer brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 60.00 chs .

August 27, 1902.

August 28, 1902: At 7 h 3 m a.m., l.m.t., I set off $39^{\circ} 46' N.$, on the lat. arc; $9^{\circ} 57' N.$, on the decl. arc; and determine a true meridian, with the solar, at the cor. of secs. 16, 17, 20, and 21.

Thence I run

East, on a random line, bet. secs. 16 and 21.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.98 Intersect N. and S. line, 5 lks. S. of the cor. of secs. 15, 16, 21, and 22.

Thence I run

$S. 89^{\circ} 58' W.$, on a true line bet. secs. 16 and 21.

Over mountain us land; through dense undergrowth.

Ascend .

6.00 Top of ridge, 50 ft. above sec. cor., bears N. and S.

Descend .

33.00 Enter heavy timber, bears N. and S.

39.98 Set a sandstone, 20x10x4 ins. 15 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{2}$ on N. face; from which a

A pinon pine, 14 ins. diam., bears N. $14^{\circ} W.$ 80 lks. dist., marked $\frac{1}{4}$ S. 16, B.T.

A pinon pine, 10 ins. diam., bears S. $25^{\circ} E.$, 75

Subdivision of T.12 S., R.14 E. -Continued.

Chains lks. dist., marked $\frac{1}{2}$ S. 21, B. T.

48.00 Bottom of hollow, 120 ft. below ridge, course N.
Ascend .

67.50 Top of ridge, 150 ft. above hollow, bears N. and S.
Descend .

79.96 The cor. of secs. 16, 17, 20, and 21.
Land, mountainous.
Soil, gravelly ; 3rd rate.
Timber, pinon pine and cedar .
Undergrowth, sage brush and service berry.
Good grass for grazing.
Mountainous or heavily timbered land, or land covered
with dense undergrowth, 79.96 chs.

N. 0° 03' W., bet. secs. 16 and 17.

Over mountainous land; through dense undergrowth.
Descend .

9.50 Bottom of hollow, 50 ft. below sec. cor., course N. 20°
W.
Ascend .

25.00 Top of ridge, 50 ft. above hollow, bears N. W. and S. E.
Descend .

38.50 Bottom of hollow, 50 ft. below ridge, course N. W.
Ascend .

40.00 Set a sandstone, 20x10x4 ins., 15 ins. in the ground,
for $\frac{1}{2}$ sec cor., marked $\frac{1}{2}$ on W. face; from which
A pinon pine, 6 ins. diam., bears S. 40° W., 30
lks. dist., marked $\frac{1}{2}$ S. 17 B. T.
A pinon pine, 20 ins. diam., bears N. 75° E., 60
lks. dist., marked $\frac{1}{2}$ S. 16, B. T.

54.00 Top of ridge, 100 ft. above hollow, bears N. W. and
S. E.
Descend .

Subdivision of T.12 S., R.14 E. -Continued.

Chains

- 64.50 Bottom of hollow, 125 ft. below ridge, course N. 60° W.
Ascend .
- 69.10 Trail, bears N.W. and S.E.
- 70.00 Top of ridge, 125 ft. above hollow, bears NW. and S.E.
Descend .
- 80.00 Set a sandstone, 24x8x4 ins., 18 ins. in the ground, for
cor. of secs. 8, 9, 16, and 17, marked with 4 notches on
S. and 4 notches on E. edges; from which
- A pinon pine, 9 ins. diam., bears N. 65° E., 80
lks. dist., marked T.12 S., R.14 E., S.9, B.T.
 - A pinon pine, 12 ins. diam. bears S. 30° E., 75
lks. dist., marked T.12 S., R.14 E., S.16, B.T.
 - A pinon pine, 12 ins. diam., bears S. 54° W. 65
lks. dist., marked T.12 S., R.14 E., S.17, B.T.
 - A pinon pine, 8 ins. diam., bears N. 30° W., 6 lks.
dist., marked T.12 S., R.14 E., S.8, B.T.

Land, mountainous.

Timber, cedar and pinon pine.

Undergrowth, sage and service berry.

Good grass for grazing.

Soil, loam and rocky; 2nd and 4th rate.

Mountainous land, or land covered with dense under-
growth, 80.00 chs.

-
- N. 89° 58' E., on a random line bet. secs. 9 and 16.
- 40.00 Set temp. $\frac{1}{2}$ sec. cor.
- 80.02 Intersect N. and S. line, at the cor. of secs. 9, 10, 15, and
16.
- Thence I run
- S. 89° 58' W., on a true line bet. secs. 9 and 16.
- Over mountainous land; through scattering timber
and undergrowth.
- Descend.
- 20.20 Bottom of hollow, 400 ft. below sec. cor., course N.E.

Subdivision of T.12 S., R.14 E., Continued...

Chains

Ascend .

25.00 Top of ridge, 200 ft. above hollow, bears N. and S.

Descend .

39.20 Bottom of canon, 350 ft. below ridge, course N.

Ascend .

40.01 Set a limestone, 18x16x5 ins., 12 ins. in the ground,
for $\frac{1}{4}$ sec. cor., marked $\frac{1}{2}$ on N. face; from whichA red pine 5 ins. diam., bears N. 80° E., 115
lks. dist., marked $\frac{1}{2}$ S. 9, B. T.A red pine, 11 ins. diam., bears S. 45° E., 65
lks. dist., marked $\frac{1}{2}$ S. 16, B. T.49.00 Top of ridge, 150 ft. above hollow, bears N. 30° E. and
S. 30° W.

Descend .

60.00 Bottom of hollow, 40 ft. below ridge, course N.

Ascend .

63.00 Top of ridge, 50 ft. above hollow, bears N. and S.

Descend .

67.00 Bottom of hollow, 60 ft. below ridge, course N. 20° E.

Ascend .

- 80.02 The cor. of secs. 8, 9, 16, and 17.

Land, mountainous.

Soil, gravelly ; 3rd rate.

Timber, cedar and pinon pine.

Undergrowth, sage and service berry.

Good grass for grazing.

Mountainous land, 80.02 chs.

Note: Knowing from former connections that the
line bet. sections 8 and 9 will not intersect
within limits I run

N. 0° 03' W., on a true line bet. secs. 8 and 9.

Over mountainous land; through heavy timber; descend.

15.00 Bottom of hollow, 40 ft. below sec. cor., course E.

Ascend .

Subdivision of T.12 S., R.14 E. - Continued.

Chains Ascend .

, 23.00 Top of ridge, 250 ft. above hollow, bears N.10°E. and
S.10°W. Trail on top of ridge.

Descend .

40:00 Set a sandstone, 18x8x4 ins., 12 ins. in the ground,
for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which

A cedar, 6 ins. diam., bears S.51°E., 36 lks.
dist. marked $\frac{1}{2}$ S.9, B.T.

A cedar, 10 ins. diam., bears N.76°W., 35 lks.
dist., marked $\frac{1}{2}$ S.8, B.T.

- 64.40 Intersect S. bdy. of Sec. 4, 28.14 chs. East of the
cor. of secs. 4 and 5, which is a limestone, 5x8x7 ins.
above ground, firmly set, and marked and witnessed as
described by the surveyor general.

Set a limestone, 18x10x4 ins., 12 ins. in the ground,
for closing cor. of secs. 8 and 9, marked with C.C. and
5 grooves on S. and 4 grooves on E. faces; from which

A cedar, 10 ins. diam., bears S.3°E., 185 lks.
dist., marked T.12 S., R.14 E., S.9, B.T.

A red pine, 5 ins. diam., bears S.31°W., 70 lks.
dist., marked T.12 S., R.14 E., S.8, B.T.

Note: I destroy all marks on the cor. of secs. 4, 5, 8, and
9, which pertain to secs. 8 and 9.

Land, mountainous.

Soil, gravelly; 3rd rate.

Timber, cedar and pinon pine.

Good grass for grazing.

Mountainous land, or heavily timbered land, 64.40 chs.

August 28, 1902: At the noon hour the sky is overcast
and solar observations are impossible.

From the cor. of secs. 5, 6, 31, and 32, on S. bdy. of Tp.
heretofore described.

I run

Subdivision of T.12 S., R.14 E., -Continued.

Chains N.0°03'W., bet.secs.31 and 32.

Over mountainous land ;through dense undergrowth.
ascend .

20.00 Top of divide ridge,between Sheep and Stone Cabin
Canons,75 ft.above sec.cor.,bears N.E.and S.W.

Descend .

31.00 Enter heavy timber,bears N.E.and S.W.

40.00 Set a sandstone,18x10x4 ins.,12 ins.in the ground,
for $\frac{1}{2}$ sec.cor.,marked $\frac{1}{4}$ on W.face;from which

A pinon pine,8 in.diam.,bears N.87°E.,75
lks.dist.,marked $\frac{1}{4}$ S.32,B.T.

A pinon pine,7 ins.diam.,bears N.50°W.20
lks.dist.,marked $\frac{1}{4}$ S.31,B.T.

This cor.is 125 ft.below ridge,

80.00 Set a sandstone,20x18x5 ins.,15 ins.in the ground,
for cor.of secs.29,30,31,and 32,marked with 1 notch
on S.and 5 notches on E.edges;from which

A pine,9 ins.diam.,bears N.67°E.,53 lks.
dist.,marked T.12 S.,R.14 E.,S.29,B.T.

An aspen,6 ins.diam.,bears S.38°E.,65
lks.dist.,marked T.12 S.,R.14 E.,S.32,B.T.

A pine,4 ins.diam.,bears S.50°W.,65 lks.
dist.,marked T.12 S.,R.14 E.,S. 31,B.T.

A pine,4 ins.diam.,bears N.65°W.,67 lks.
dist.,marked T.12 S.,R.14 E.,S.30,B.T.

Land,mountainous.

Soil,gravelly;2nd and 3rdrate.

Timber,pine and aspen.

Undergrowth,sage and deer brush.

Good grass for grazing.

Mountainous or heavily timberedland,or land covered
with dense undergrowth,80.00 chs.

East,on a random line bet.secs.29 and 32.

 Subdivision of T.12 S., R.14 E. -Continued.

Chains

- 40.00 Set temp. $\frac{1}{2}$ sec. cor.
- 80.10 Intersect N. and S. line, 10 lks. S. of the cor. of
secs. 28, 29, 32, and 33.
- Thence I run
- S. 89° 56' W., on a true line bet. secs. 29 and 32.
- Over mountainous land; through dense undergrowth
and scattering timber.
- Ascend .
- 3.00 Top of ridge, 20 ft. above sec. cor., bears N. and S.
- Descend .
- 18.50 Bottom of hollow, 40 ft. below ridge, course S.
- Ascend .
- 25.00 Leave timber, bears N. and S.
- 40.05 Set a limestone, 24x9x4 ins., 18 ins. in the ground,
for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; and raise a mound
of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits imprac-
ticable.
- 52.00 Trail on top of divide ridge between Sheep and Stone
Cabin Canons, 400 ft. above canon, bears N. 10° E. and
S. 10° W.
- Descend .
- 55.00 Enter heavy timber, bears E. and S. Leave undergrowth.
- 79.00 Bottom of canon, 400 ft. below ridge, course N. 10° W.
- Ascend .
- 80.10 The cor. of secs. 29, 30, 31, and 32.
- Land, mountainous.
- Soil, gravelly loam; 2nd rate.
- Timber, pine and aspen.
- Undergrowth, sage deer brush and service berry.
- Good grass for grazing.
- Mountainous or heavily timbered land, or land covered
with dense undergrowth, 80.10 chs.

August 28, 1902.

August 29, 1902. At 7 h 2 m a.m., l.m.t., I set off 39°
44' N., on the lat. arc; 9° 36' N., on the decl. arc; and

Subdivision of T. 12 S., R. 14 E. -Continued.

- Chains determine a true meridian, with the solar, at the cor. of secs. 29, 30, 31, and 32. Thence I run West, on a random line bet. secs. 30 and 31.
- 40.00 Set temp. & sec. cor.
- 107.14 Intersect W. bdy. of Tp., 13 lks. N. of the cor. of secs. 25, 30, 31, and 36, which is a sandstone, 9x11x6 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general.
- Thence I run N. 89° 56' E., on a true line bet. secs. 30 and 31. Over mountainous land; through scattering timber. Ascend .
- 59.00 Top of ridge, 800 ft. above Sheep Canon, bears N.W. and S.E. Descend .
- 67.14 Set a sandstone, 18x9x6 ins., 12 inc. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
- ~ 107.14 The cor. of secs. 29, 30, 31, and 32. Land, mountainous. Soil, gravelly; 3rd rate. Timber, pine and aspen. Good grass for grazing. Mountainous land, 107.14 chs.

N. 0° 03' W., bet. secs. 29 and 30.

- Over mountainous land; through Heavy timber. Descend .
- 5.75 Bottom of Canon, 125 ft. below sec. cor., course N.W. Small seeping spring in bottom. Ascend .
- 18.50 Top of ridge, 300 ft. above canon, bears E. and W. Descend .
- 30.75 Bottom of hollow, 300 ft. below ridge, course W. Ascend .

Subdivision of T.12 S., R.14 E. -Continued.

Chains

40.00 Set a limestone, 16x10x5 ins., 12 ins. in the ground,
for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which

A pinon pine, 36 ins. diam., bears S. 86° E., 30
lks. dist., marked $\frac{1}{2}$ S. 29, B.T.

A pinon pine, 12 ins. diam., bears S. 75° W., 125
lks. dist., marked $\frac{1}{2}$ S. 30, B.T.

This cor. is 200 ft. above hollow.

47.50 Top of ridge, 300 ft. above canon, bears E. and W.

Leave timber, bears with ridge,

Descend .

50.00 Enter heavy timber, bears E. and W.

65.00 Bottom of canon, 300 ft. below ridge course W.

Leave heavy and enter scattering timber.

Ascend .

80.00 Set a sandstone, 16x8x8x ins., 11 ins. in the ground,
for cor. of secs. 19, 20, 29, and 30, marked with 2 notches
on S. and 5 notches on E. edges; from which

A pine, 18 ins. diam., bears N. 33° E., 75 lks.
dist., marked T.12 S., R.14 E., S. 20, B.T.

A pine, 12 ins. diam., bears S. 33° E., 105 lks.
dist., marked T.12 S., R.14 E., S. 29, B.T.

A pine, 14 ins. diam., bears S. 20° W., 140 lks.
dist., marked T.12 S., R.14 E., S. 30, B.T.

A pine, 14 ins. diam., bears N. 69° W., 110 lks.
dist., marked T.12 S., R.14 E., S. 19, B.T.

Land, mountainous.

Soil, gravelly; 3rd rate.

Timber, pine and aspen.

Undergrowth, deer brush.

Good grass for grazing.

Mountainous or heavily timbered land, 80.00 chs.

N. 89° 56' E., on a random line bet. secs. 20 and 29.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

Subdivision of T.12 S., R.14 E. -Continued.

Chains

80.12 Intersect N. and S. line, 24 lks. S. of the cor. of secs.
20, 21, 28, and 29.

Thence I run

S. $89^{\circ}46'W.$, on a true line bet. secs. 20 and 29.

Over mountainous land; through scattering undergrowth.

Descend .

27.25 Bottom of hollow, 200 ft. below sec. cor., course N.

Ascend .

40.06 Set a sandstone, 20x12x4 ins., 15 ins. in the ground, for
 $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; and raise a mound
of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impractic-
able.

62.00 Top of ridge, 200 ft. above hollow, bears N. and S.

Descend .

80.12 The cor. of secs. 19, 20, 29, and 30.

Land, mountainous.

Soil, gravelly; 3rd rate.

Timber, pine and aspen.

Undergrowth, sage and deer brush.

Good grass for grazing.

Mountainous land; 80.12 chs.

August 29, 1902: At the noon hour the sky is overcast
and solar observations are impossible.

S. $89^{\circ}56'W.$, on a random line bet. secs. 19 and 30.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

106.74 Intersect E. bdy. of Tp., at the cor. of secs. 19, 24, 25,
and 30, which is a sandstone, 5x10x7 ins., above
ground, firmly set, and marked and witnessed as described
by the surveyor general.

Thence I run

N. $89^{\circ}56'E.$, on a true line bet. secs. 19 and 30.

Over mountainous land; through scattering timber.

Descend .

Subdivision of T.12 S., R.14 E. -Continued.

Chains

- 42.00 Bottom of Canon, 1000 ft. below sec. cor., course
N.10°E.
Ascend .
- 52.00 Top of ridge, 275 ft. above canon, bears N.10°W. and
S.10°E.
Descend .
- 66.74 Set a sandstone, 18x10x4 ins., 12 ins. in the ground,
 $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; from which
A red pine, 5 ins. diam., bears N.10°E., 70
lks. dist., marked $\frac{1}{2}$ S.19, B.T.
A red pine, 6 ins. diam., bears S.5°W., 60
lks. dist., marked $\frac{1}{2}$ S.30, B.T.
- 78.00 Sandstone ledge, 30 ft. high, bears N. and S.
- 84.00 Bottom of canon, 150 ft. below ridge, course N.W.
Ascend .
- 85.50 Top of ridge, 25 ft. above canon, bears N.W. and S.E.
Descend .
- 86.50 Bottom of Canon, course N.W.
Ascend .
- 106.74 The cor. of secs. 19, 20, 29, and 30.
Land, mountainous.
Soil, gravelly; 3rd rate.
Timber, pine and cedar.
Undergrowth, sage .
Good grass for grazing.
Mountainous land, 106.74 chs.

N.0°03'W., bet. secs. 19 and 20.

Over mountainous land; through heavy timber.

Ascend .

- 20.00 Top of ridge, 100 ft. above sec. cor., bears N.W. and
S.E.

Descend .

Subdivision of T.12 S., R.14 E. -Continued.

Chains

40.00 Set a sandstone, 30x12x6 ins., 22 ins. in the ground,
for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which

A pinon pine, 14 ins. diam., bears E. 58 lks.
dist., marked $\frac{1}{2}$ S. 20, B.T.

A mahogany, 4 ins. diam., bears S. 22° W., 133
lks. dist., marked $\frac{1}{2}$ S. 19, B.T.

Leave timber and enter dense undergrowth, bears E.
and W.

71.00 Bottom of hollow, 200 ft. below ridge, course N.E.

Enter heavy timber, bears N.E. and S.W.

Ascend .

80.00 Set a sandstone, 36x12x4 ins., 24 ins. in the ground
for cor. of secs. 17, 18, 19, and 20, marked with 3 notches
on S. and 5 notches on E. edges; from which

A pinon pine, 8 ins. diam., bears N. 45° E., 65
lks. dist., marked T.12 S., R.14 E., S.17, B.T.

A pinon pine, 8 ins. diam., bears S. 35° E., 85
lks. dist., marked T.12 S., R.14 E., S.20, B.T.

A pinon pine, 14 ins. diam., bears S. 40° W., 104
lks. dist., marked T.12 S., R.14 E., S.19, B.T.

A pinon pine, 18 ins. diam., bears N. 70° W., 87
lks. dist., marked T.12 S., R.14 E., S.18, B.T.

Land, mountainous.

Soil, gravelly; 4th rate.

Timber, cedar and pinon pine.

Undergrowth, deer brush and sage brush and mahogany.

Good grass for grazing.

Mountainous or heavily timbered land, 80.00 chs.

August 29, 1902.

August 30, 1902. At 7 h 30 m a.m., l.m.t., I set off
39° 46' N., on the lat. arc; 9° 15' N., on the decl. arc;
and determine a true meridian, with the solar, at the

Subdivision of T.12 S., R.14 E. -Continued.

Chains cor. of secs. 17, 18, 19, and 20.

Thence I run

N. 89° 46' E., on a random line bet. secs. 17 and 20.

40.00 Set temp. γ sec. cor.

80.20 Intersect N. and S. line, 10 lks. N. of the cor. of secs.
16, 17, 20, and 21.

Thence I run

S. 89° 50' W., on a true line bet. secs. 17 and 20.

Over mountainous land; through scattering timber;
Ascend .

20.00 Top of ridge, 200 ft. above sec. cor., bears N.W. and
S.E.

Descend .

30.50 Bottom of canon, 250 ft. below ridge, course N. 20° W.
A very small stream in bottom. There is a small spring
about 20.00 chs. up this canon, not seen from line.
Leave timber, bears N. 20° W. and S. 20° E.

Ascend .

40.10 Set a sandstone, 22x12x5 ins., 16 ins. in the ground, for
 $\frac{1}{2}$ sec. cor., marked γ on N. face; and raise a mound of
stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impractic-
able.

41.50 Top of ridge, 250 ft. above hollow, bears N. and S.
Descend .

71.50 Bottom of hollow, 250 ft. below ridge, course N.
Enter heavy timber.

Ascend .

— 80.20 The cor. of secs. 17, 18, 19, and 20 .

Land, mountainous.

Soil, gravelly; 3rd rate.

Timber, cedar and pinon pine.

Good grass for grazing.

Mountainous or heavily timbered land, 80.20 chs.

Subdivision of T.12 S., R.14 E. -Continued.

Chains

- S.89°56'W., on a random line bet. secs. 18 and 19.
- 40.00 Set temp. $\frac{1}{2}$ sec. cor.
- 106.48 Intersect W. bdy. of Tp., 9 lks. S. of the cor. of secs. 13, 18, 19, and 24, heretofore described.
- Thence I run
- N.89°59'E., on a true line bet. secs. 18 and 19.
- Over mountainous land; through scattering timber and scattering undergrowth.
- Descend from ridge.
- 29.00 Bottom of Sheep Canon, 500 ft. below sec. cor., course N.E.
- Ascend .
- 66.48 Set a sandstone, 20x10x4 ins., 15 ins. in the ground for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; from which
- A red pine, 6 ins. diam., bears N.4°W., 40 lks. dist., marked $\frac{1}{2}$ S.18, B.T.
- A red pine, 8 ins. diam., bears S.10°W., 30 lks. dist., marked $\frac{1}{2}$ S.19, B.T.
- 67.10 Top of ridge, 700 ft. above Sheep Canon, bears N. and S.
- Descend .
- 85.00 Bottom of canon, 250 ft. below ridge, course N.
- Ascend .
- 101.00 Top of ridge, 250 ft. above hollow, bears N.10°E. and S 10°W.
- Descend .
- 106.48 The cor. of secs. 17, 18, 19, and 20.
- Land, mountainous .
- Soil, gravelly; 3rd rate.
- Timber, cedar and pinon pine.
- Undergrowth, sage .
- Good grass for grazing.
- Mountainous land, 106.48 chs.

Subdivision of T.12 S., R.14 E.-Continued.

Chains

Note: I run this mile same as the one between secs. 9 and 10 and for the same reason.

Therefore I run

N.0°03'W., bet. secs. 17 and 18.

Over mountainous land; through heavy timber;

Ascend .

18.00 Top of ridge, 60 ft. above sec. cor., bears N.E. and S. 10°W.

Descend.

26.30 Bottom of canon, 400 ft. below ridge, course W.

Ascend .

40.00 Set a sandstone, 16x12x4 ins., 11 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; from which

A pinon pine, 6 ins. diam., bears N.85°E., 20 lks. dist., marked $\frac{1}{4}$ S. 17, B.T.

A red pin, 20 ins. diam., bears N.80°W., 20 lks. dist., marked $\frac{1}{4}$ S. 18, B.T.

This cor. is 250 ft. above canon.

50.00 Top of ridge, 350 ft. above canon, bears E. and W.

Descend .

64.00 Bottom of hollow, 300 ft. below ridge, course W.

Ascend .

71.00 Top of ridge, 150 ft. above hollow, bears E. and W.

Descend .

77.00 Bottom of hollow, 100 ft. below ridge, course W.

Ascend .

80.00 Set a sandstone, 20x10x5 ins., 15 ins. in the ground, for N.W. cor. of secs. 17 and N.E. cor. of secs. 18, marked with 4 notches on S. and 5 notches on E. edges; from which

A pinon pine, 12 ins. diam., bears S.30°E., 35 lks. dist., marked T.12 S., R.14 E., S.17 B.T.

A pinon pine, 14 ins. diam., bears S.25°W., 40 lks. dist., marked T.12 S., R.14 E., S.18, B.T.

Land, mountainous.

Subdivision of T.12 S., R.14 E. -Continued.

Chains Soil, gravelly; 3rd rate.

Timber, cedar and pinon pine.

Undergrowth, sage .

Good grass for grazing.

Mountainous or heavily timbered land, 80.00 chs.

August 30, 1902. At this cor. I set off $9^{\circ}09'N.$, on the decl. arc; and at 0 h 2 m p.m., l.m.t., observe the sun on the meridian, the resulting is $39^{\circ}47'N.$

N. $89^{\circ}50'E.$, on a random line bet. secs. 8 and 17.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

80.22 Intersect N. and S. line, 24 lks. *N.* of the cor. of secs. 8, 9, 16, and 17,

Thence 1 run

West, on a true line bet. secs. 8 and 17.

Over mountainous land; through heavy timber.

Ascend .

6.00 Top of ridge, 30 ft. above sec. cor., bears $N.10^{\circ}W.$ and $S.10^{\circ}E.$ Trail on top .

Descend.

33.50 Bottom of canon, 900 ft. below ridge, course N. Creek, 2 lks. wide, 2 ins. deep, in bottom.

Ascend .

40.11 Set a sandstone, 18x11x4 ins. in, 5 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; from which

A mahogany, 6 ins diam. bears $S.35^{\circ}E.$, 85 lks. dist., marked $\frac{1}{2}$ S.17, B.T.

A pinon pine, 8 ins. diam., bears $N.25^{\circ}E.$, 125 lks. dist., marked $\frac{1}{2}$ S.8, B.T.

44.00 Top of ridge, 600 ft. above canon, bears $N.20^{\circ}W.$ and S.E.

Descend .

55.00 Bottom of canon, 500 ft. below ridge, course N.

Ascend.

Subdivision of T.12 S., R.14 E. -Continued.

Chains

- 63.00 Top of ridge, 400 ft. above canon, bears N. and S.
Descend .
- 80.22 The cor. of secs. 17, and 18.
Land, mountainous.
Soil, gravelly; 3rd rate.
Timber, cedar and pinon pine.
Undergrowth, sage .
Good grass for grazing.
Mountainous or heavily timbered land, 80.22 chs.

For reasons already explained I run

- West, on a true line bet. secs. 8 and 18.
Over mountainous land; through heavy timber.
Descend .
- 5.00 Leave timber, bears N.E. and S.W.
15.00 Wood road, bears N.E. and S.W.
18.00 Wash, in bottom of Sheep Canon, 400 ft. below sec. cor.,
course N.E.
Ascend .
- 28.28 Intersect East bdy. of sec. 7, 15.50 chs. North of the
cor. established for the cor. of secs. 7, 8, 17, and 18,
which is a limestone, 12x15x15 ins. above ground, firmly
set, and marked and witnessed as described by the
surveyor general.

Note: I destroy all marks on the above described cor.
which pertain to secs. 8, 17, and 18, and remark it for
the S.E. cor. of sec. 7.

At my intersection with the E. bdy. of Sec. 7, 15.50 chs.
North of the S.E. cor. I

Set a limestone, 24x10x4 ins., 18 ins. in the ground, for
S.W. cor. of sec. 8, marked with 5 notches on E. edge;
and raise a mound of stone, 2 ft. base, 1½ ft. high,
N.E. of cor. Pits impracticable.

Subdivision of T.12 S., R.14 E. -Continued.

Chains Land, mountainous.
 Soil, gravelly; 3rd rate.
 Timber, cedar and pinon pine.
 Undergrowth, sage brush.
 Good grass for grazing.
 Mountainous land, or heavily timbered land, 28.28 chs.

August 30, 1902.

GENERAL DESCRIPTION.

This township is all mountainous and the soil ranges from sandy and gravelly loam; 2nd rate to rocky ground, 4th rate. The greater part of the soil is gravelly and white clay; 3rd rate. The soil in the northern part of the township is rocky and gets better towards the south end.

Scrub cedar and pinon pine timber is found all over the township and some red pine, white pine, and aspen timber in the southern part.

Sage, service berry, and deer brush is found in all parts of the township, but it is scattering.

There is an abundant growth of grass all over the township.

The township is well watered for grazing purposes, but not for irrigating purposes.

The south half of the township is particularly well adapted for grazing purposes.

There is no mineral in the township.

Hank Stewart has a house and cultivated land in sec. 3, not seen from line

John R. Stewart.
 U. S. Deputy Surveyor.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by _____, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of _____

showing the respective capacities in which they acted:

- _____, Chainman.
_____, Chainman.
_____, Moundman.
_____, Moundman.
_____, Arman.
_____, Arman.
_____, Flagman.

Official affidavit see book Q. J. H. S. R. E.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____, United States Deputy Surveyor, in surveying all those parts or portions of the _____

_____ of the _____ meridian, _____ of _____, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for _____

- _____, Chainman.
_____, Chainman.
_____, Moundman.
_____, Moundman.
_____, Arman.
_____, Arman.
_____, Flagman.

Official affidavit see book Q. J. H. S. R. E.

Subscribed and sworn to before me this _____ day of _____, 189 _____



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from _____ United States Surveyor General for _____, bearing date of the _____ day of _____, 189 _____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____ of the _____ meridian, in the _____ of _____, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

South Range 14 East of the Salt Lake Meridian

United States Deputy Surveyor.

Subscribed by said _____, and sworn to before me }
 this _____ day of _____, 189 _____ }



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL

Salt Lake City, Utah, January 13, 1904, 189 _____

The foregoing field notes of the survey of *The subdivision lines of Township 12 South Range 14 East of the Salt Lake Base & Meridian, Utah*

executed by *John R. Stewart* under his contract No. *250*, dated *January 2, 1902*, 189 _____, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Edward H. Underhill
 United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General.

Filed Jan 21-1903
321
Moffat
Sept 15
1902

4-679.

M

BOOK A-294

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FIELD NOTES

OF THE SURVEY OF THE

N.S.S.

SOUTH, EAST, AND WEST BOUNDARIES

of

Township No. 11 South, Range No. 15 East,

Of the SALT LAKE BASE AND Meridian,

in the STATE OF UTAH.

AS SURVEYED BY

John R. Stewart, United States Deputy Surveyor,

Under his Contract No. 250, dated January 2, 1902, 189x

Survey commenced August 30, 1902, 189x

Survey completed September 2, 1902, 189x

6-151

West Bdy high	6 00.485	
Cloudy		9-00'
South Bdy high	5 61.50'	
" " low	16.10'	
East Bdy high	6 00.75'	
Cloudy		11-00'

17-00'

NAMES AND DUTIES OF ASSISTANTS.

Hyrum G. Smith Chainman

John G. Smith Chainman

Jacob A. Acord Moundman

Edwin A. Peay Moundman

Joseph A. Passey Axman

Andy J. Stewart Axman

Otto R. Stewart Flagman

A preliminary affidavit submitted to H. Sp. 10544

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PRELIMINARY OATHS OF ASSISTANTS.

WE, _____ and _____ do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of _____

_____, *Chainman.*

_____, *Chainman.*

Subscribed and sworn to before me this _____ }
day of _____, 189 }



WE, _____ and _____ do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of _____

_____, *Moundman.*

_____, *Moundman.*

Subscribed and sworn to before me this _____ }
day of _____, 189 }



WE, _____ and _____ do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of _____

_____, *Axman.*

_____, *Axman.*

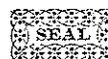
Subscribed and sworn to before me this _____ }
day of _____, 189 }



I, _____, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of _____

_____, *Flagman.*

Subscribed and sworn to before me this _____ }
day of _____, 189 }



West boundary of T.11 S., R.15 E.

Survey commenced August 30, 1902, and executed with a W. and L. E. Gurley light mountain transit, No. 1, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the latitude and declination arcs.

The instrument was examined, tested on the true meridian, at Salt Lake City, found correct, and was approved by the surveyor general, for Utah, on June 14, 1902.

I examine the adjustments of the instrument, and correct the level and collimation errors, then, to test the solar apparatus, by comparing its indications resulting from solar observations made during p.m. and a.m. hours, with a true meridian, established by Polaris observation, I proceed as follows:

At the cor. of Tps. 11 and 12 S., Rs. 14 and 15 E., latitude $39^{\circ}48'40''$ N., longitude $110^{\circ}19'31''$ W., I set off $39^{\circ}49'$ N., on the lat. arc; $9^{\circ}06'$ N., on the decl. arc; and at 4 h 57 m p.m., l.m.t., determine a true meridian with the solar, and mark a point thereof on a stone firmly set in the ground, 5.00 chs. N. of the cor.

At 8 h 55 m p.m., l.m.t., I observe Polaris at eastern elongation, in accordance with the Manual, and mark a point in the line thus determined, by a tack driven in a wooden plug, set in the ground, 5.00 chs. N. of the cor., east of the stone already set.

August 30, 1902.

August 31, 1902: At 6 h 31 m a.m., l.m.t., I lay off

West boundary of T.11 S., R.15 E.-Continued.

Chains the azimuth of Polaris $1^{\circ}34.8'$ to the west, and mark a point in the true meridian, thus determined, by cutting a small groove in the stone already set 5.00 chs. N. of the cor.; this mark falls 0.38 ins. east of the true meridian determined with the solar.

At 7 h 2 m a.m., l.m.t., I set off $30^{\circ}49'N.$, on the lat. arc; $8^{\circ}53'N.$, on the decl. arc; and mark a point in the true meridian determined with the solar, by a cross on the stone already set 5.00 chs. N. of the cor.; on which the true meridian falls 0.28 ins. east of the true meridian established by Polaris observation.

The solar apparatus by p.m. and a.m. observations defines positions for true meridians, respectively about $0'20''$ west and $0'15''$ east of the true meridian established by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 7 h 2 m a.m., l.m.t., is $16^{\circ}20.7'W.$, the angle thus determined reduced by the table page 100 of the Manual, gives the mean mag. decl. $16^{\circ}15'E.$

From the cor. of Tps. 11 and 12 S., Rs. 14 and 15 E., heretofore described,

I run
North, bet. secs. 31 and 36.

Over mountainous land; through scattering timber and scattering undergrowth.

Descend .

8.15 Bottom of hollow, 250 ft. below cor., course E.

Ascend .

13.50 Top of ridge, 200 ft. above hollow, bears E. and W.

Descend into Nine Mile Canon.

25.00 Foot of descent, 400 ft. below ridge, bears E. and W.

West boundary of T.11 S., R.15 E. -Continued.

- Chains Fence, bears E. and W. Enter dense undergrowth, bears E. and W. Thence over level bottom of Nine Mile Canon.
- 29.25 Nine Mile Creek, 10 lks. wide, 10 ins. deep, moderate current, water contains some sulphur in solution, course E.
- 37.00 Price-Vernal road, in canon, bears E. and W.
37.50 Price-Fort DuChesne telephone line, bears E. and W.
- 38.00 Leave canon bottom, bears E. and W. Ascend.
- 40.00 Set a sandstone, 24x10x4 ins., 18 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
- 40.05 Foot of perpendicular cliff 40 ft. high, bears E. and W. Thence over a series of ledges ranging from 10 ft. to 75 ft. high, with a general bearing E. and W.
- 80.00 Set a limestone, 20x10x8 ins., 15 ins. in the ground, for cor. of secs. 25, 30, 31, and 36, marked with 5 notches on N. and 1 notch on S. edges; from which
- A pinon pine, 5 ins. diam., bears N. 50° E., 70 lks. dist., marked T.11 S., R.15 E., S.30, B.T.
 - A pinon pine, 8 ins. diam., bears S. 34° E., 28 lks. dist., marked T.11 S., R.15 E., S.31, B.T.
 - A cedar, 12 ins. diam., bears S. 32° W., 55 lks. dist., marked T.11 S., R.14 E., S.36, B.T.
 - A pinon pine, 8 ins. diam., bears N. 5° W., 85 lks. dist., marked T.11 S., R.14 E., S.25, B.T.
- Land, mountainous.
- Soil, clay and gravelly; 3rd rate.
- Timber, cedar, and pinon pine.
- Undergrowth, sage and oak brush and greasewood.
- Good grass for grazing.
- Mountainous land, 80.00 chs.

West boundary of T.11 S., R.15 E., -Continued.

- Chains. Over mountainous land; through scattering timber and scattering undergrowth.
- Ascend .
- .75 Top of ridge, 10 ft. above sec. cor., and 600 ft. above Nine Mile Canon, bears E. and W.
- Descend .
- 8.00 Bottom of hollow, 200 ft. below ridge, course S. E.
- Ascend .
- 24.58 Foot of perpendicular ledge, 20 ft. high, bears E. and W.
- 30.00 Top of ridge, 600 ft. above hollow, bears E. and W.
- Descend .
- 40.00 Set a limestone, 20x9x5 ins., 15 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which
- A pinon pine, 8 ins. diam., bears S. 83° E., 82 lks. dist., marked $\frac{1}{2}$ S. 30, B. T.
- A pinon pine, 10 ins. diam., bears N. 74° W., 40 lks. dist. marked $\frac{1}{2}$ S. 25, B. T.
- 50.00 Bottom of hollow, 250 ft. below ridge, course E.
- Ascend .
- 58.00 Leave timber and enter dense sage brush, bears E. and W.
- 66.00 Top of ridge, 200 ft. above hollow, bears E. and W.
- Descend .
- 77.00 Bottom of hollow, 150 ft. below ridge, course E.
- Ascend .
- 80.00 Set a sandstone, 30x11x4 ins., 22 ins. in the ground, for cor. of secs. 19, 24, 25, and 30, marked with 4 notches on N. and 2 notches on S. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
- Land, mountainous.
- Soil, clay and gravelly; 3rd rate.
- Timber, cedar and pinon pine.
- Undergrowth, sage brush.
- & very little grass.

-5-

West boundary of T.11 S., R.15 E. -Continued.

Chains Mountainous land, or land covered with dense undergrowth, 80.00 chs.

North, bet. secs. 19 and 24.

Over mountainous land; through dense sage brush; ascend .

- 3.50 Leave sage brush and enter heavy cedar and pinon pine timber, bears E. and W.
- 15.00 Top of ridge, 100 ft. above sec. cor., bears N.W. and S.E.
Descend .
- 34.00 Bottom of hollow, 250 ft. below ridge, course S. 60° E.
Ascend .
- 40.00 Set a limestone, 16x11x8 ins., 11 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which
- A pinon pine, 5 ins. diam., bears N. 54° E., 150 lks. dist., marked $\frac{1}{2}$ S. 19, B.T.
 - A pinon pine, 5 ins. diam., bears S. 83° W., 135 lks. dist., marked $\frac{1}{2}$ S. 24, B.T.
- This cor. is on top of ridge, 50 ft. above hollow, bears S. 50° E. and N. 50° W.
Descend .
- 45.00 Bottom of canon, 300 ft. below ridge, course S. 70° E.
Ascend :
- 57.00 Top of ascent, 300 ft. above canon, bears N. 70° E. and S. 70° W.
Thence over rolling mesa.
- Leave heavy timber and enter scattering timber and dense undergrowth, bears N. 70° E. and S. 70° W.
- 80.00 Set a limestone, 24x7x4 ins., 18 ins. in the ground, for cor. of secs. 13, 18, 19, and 24, marked with 3 notches on N. and 3 notches on S. edges; from which
- A pinon pine, 14 ins. diam., bears N. 15° E. 240 lks. dist., marked T. 11 S., R. 15 E., S. 18, B.T.

West boundary of T.11 S., R.15 E. -Continued.

Chains A pinon pine, 5 ins. diam., bears S. 85° E., 130
lks. dist., marked T.11 S., R.15 E., S.19, B.T.

No other trees within limits; raise a mound of stone,
2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.

Land, mountainous and rolling mesa.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

A very little grass.

Mountainous or heavily timbered land, or land covered
with dense undergrowth, 80.00 chs.

August 31, 1902: At the noon hour the sky is overcast
and solar observations are impossible.

North, bet. secs. 13 and 18.

Over rolling mesa; through dense undergrowth and
scattering timber.

40.00 Set a quartzite stone, 24x7x4 ins., 18 ins. in the
ground, for ¼ sec. cor., marked ¼ on W. face; from which

A pinon pine, 4 ins. diam., bears N. 80° E., 60
lks. dist., marked ¼ S. 18, B.T.

A pinon pine, 10 ins. diam., bears N. 60° W., 65
lks. dist., marked ¼ S. 13, B.T.

46.00 Leave timber, bears E. and W.

51.00 Leave undergrowth and enter heavy timber, bears E. and
W.

72.00 Leave mesa, bears N. 80° E. and S. 80° W.

Ascend .

75.00 Top of ridge, 200 ft. above mesa, bears N. E. and S. W.

Descend .

80.00 Set a quartzite stone, 16x8x6 ins., 11 ins. in the ground,
for cor. of secs. 7, 12, 13, and 18; marked with 2 notches
on N. and 4 notches on S. edges; from which

A pinon pine, 5 ins. diam., bears N. 45° E., 85
lks. dist., marked T.11 S., R.15 E., S. 7, B.T.

West boundary of T.11 S., R.15 E.-Continued.

Chains

- A pinon pine, 6 ins. diam., bears S. 3° E., 103
lks. dist., marked T.11 S., R.15 E., S.18, B.T.
- A pinon pine, 6 ins. diam., bears S. 48° W., 63
lks. dist., marked T.11 S., R.14 E., S.13, B.T.
- A pinon pine, 8 ins. diam., bears N. 55° W., 135
lks. dist., marked T.11 S., R.14 E., S.12, B.T.

Land, mountainous and rolling mesa.

Soil, white clay ; 3rd rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush and shadscales.

No grass.

Mountainous or heavily timbered land, or land covered
with dense undergrowth, 80.00 chs.

North, bet. secs. 7 and 12.

Over mountainous land; through heavy timber.

Descend .

10.00 Bottom of hollow, 200 ft. below sec. cor., course S. E.

Ascend .

27.50 Top of ridge, 300 ft. above hollow, bears N. E. and S. W.

Descend .

37.90 Bottom of hollow, 100 ft. below ridge, course N. 70° W.

Ascend .

40.00 Set a sandstone, 16x8x7 ins. 11 ins. in the ground, for
¼ sec. cor., marked ¼ on W. face; from which

A pinon pine, 8 ins. diam., bears N. 70° E., 60
lks. dist., marked ¼ S. 12, B.T.

A pinon pine, 8 ins. diam., bears N. 70° E., 70
lks. dist., marked ¼ S. 7, B.T.

61.50 Top of ridge, 150 ft. above hollow, bears E. and W.

Descend .

74.50 Bottom of hollow, 60 ft. below ridge, course W.

Ascend .

West boundary of T.11 S., R.15 E. -Continued.

Chains

- 77.50 Top of ridge, 60 ft. above hollow, bears N.E. and S.W.
Descend .
- 80.00 Set a sandstone, 18x12x4 ins., 12 ins. in the ground,
for cor. of secs. 1, 6, 7, and 12, marked with 1 notch
on N. and 5 notches on S. edges; from which
- A pinon pine, 15 ins. diam., bears N. 45° E., 80
lks. dist., marked T.11 S., R.15 E., S. 6, B.T.
 - A pinon pine, 4 ins. diam., bears S. 12° E., 65
lks. dist., marked T.11 S., R.15 E., S. 7, B.T.
 - A pinon pine, 12 ins. diam., bears S. 79° W., 60
lks. dist., marked T.11 S., R.14 E., S. 12, B.T.
 - A pinon pine, 10 ins. diam., bears N. 22° W.,
30 lks. dist., marked T.11 S., R.14 E., S. 1, B.T.

Land, mountainous.

Soil, gravelly and white clay loam; 3rd rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

No grass

Mountainous or heavily timbered land, 80.00 chs.

North, bet. secs. 1 and 6 .

Over mountainous land; through heavy timber:

Descend .

- 15.50 Bottom of hollow, 100 ft. below sec. cor., course S.W.

Ascend .

- 24.00 Top of divide ridge between Nine Mile Canon and
the DuChesne Valley, 100 ft. above canon, bears E. and
W.

Descend .

- 30.00 Bottom of hollow, 30 ft. below ridge, course N.E.

Ascend .

- 40.00 Set a sandstone, 20x15x4 ins., 15 ins. in the ground,
for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; from which

West boundary of T.11 S., R.15 E. -Continued.

Chains

A pinon pine, 18 ins. diam., bears S. 77° E., 65
lks. dist., marked $\frac{1}{2}$ S. 6, B.T.

A pinon pine, 6 ins. diam., bears S. 81° W., 40
lks. dist., marked $\frac{1}{2}$ S. 1, B.T.

80.48 Intersect the Second Standard Parallel South, 9.00
chs. West of the standard cor. of Tps. 10 S., Rs. 14
and 15 E., which is a sandstone, 6x14x6 ins., above
ground, firmly set, and marked and witnessed as des-
cribed by the surveyor general.

Set a limestone, 20x20x4 ins., 15 ins. in the ground,
for closing cor. of Tps. 11 S., Rs. 14 and 15 E., marked
C.C. 11 S. on S., 14 E., on W. and 15 E. on E. faces; with
6 grooves on S., E., and W. faces; from which

A pinon pine, 11 ins. bears S. 46° E., 85 lks.
dist., marked T. 11 S., R. 15 E., S. 6, B.T.

A pinon pine, 7 ins. diam., bears S. 53° W., 53
lks. dist., marked T. 11 S., R. 14 E., S. 1, B.T.

Land, mountainous .

Soil, white clay; 3rd rate.

Timber, cedar and pinon pine.

Undergrowth, scattering sage brush.

No grass.

Mountainous or heavily timbered land, 80.48 chs.

August 31, 1902.

SOUTH BOUNDARY OF T. 11 S., R. 15 E.

September 1, 1902: At 8 h 2 m a.m., l.m.t., I set off
39° 49' N., on the lat. arc; 8° 30' N., on the decl. arc;
and determine a true meridian, with the solar, at the

South boundary of T.11 S., R.15 E. - Continued.

Chains

- cor. of Tps. 11 and 12 S., R. 14 and 15 E., heretofore described.
- Thence I run
- East, on a true line bet. secs. 6 and 31 along S. bdy. of T. 11 S., R. 15 E.
- Over mountainous land; through scattering timber and scattering undergrowth.
- Descend .
- 4.00 Bottom of hollow, 100 ft. below Tp. cor., course N.
- Ascend .
- 13.000 Top of ridge, 100 ft. above hollow, bears N. and S.
- Descend .
- 20.00 Bottom of hollow, 100 ft. below ridge, course N.
- Ascend .
- 37.80 Allowing for convergency of meridian
Set a sandstone, 18x14x12 ins., 12 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
- 50.25 Top of ridge, 150 ft. above hollow, bears N. and S.
- Descend .
- 64.25 Foot of descent, 600 ft. below ridge, bears N. 60° W. and S. 60° E. Enter bottom of Nine Mile Canon.
- Enter dense greasewoods and leave timber.
- 66.50 Water ditch, 4 lks. wide, 1 ft. deep, course S. 60° E.
- 77.60 Set a quartzite, 20x12x10 ins., 15 ins. in the ground, for cor. of secs. 5, 6, 31, and 32, marked with 5 notches on E. and 1 notch on W. edges; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
- Land, mountainous and level canon bottom.
- Soil, white clay ; 3rd rate.
- Timber, cedar and pinon pine.
- Undergrowth, sage brush and greasewood.
- Good grass for grazing.
- Mountainous land, or land covered with dense under-

South Boundary of T.11 S., R.15 E. -Continued.

Chains growth, 77.60 chs.

East, on a true line bet. secs. 5 and 32.

Over level canon bottom ; through dense greasewood.

1.18 Leave greasewood and enter cultivated field, bears
N. and S.

8.18 Leave cultivated land, and enter dense greasewood,
bears N. and S. (This cultivated land is claimed by
Mrs. Francis)

9.25 Leave canon bottom, bears N. 60° E. and S. 60° W.

Ascend abruptly.

13.00 Top of ridge, 200 ft. above canon, bears N. and S.

Descend.

25.00 Foot of descent, 250 ft. below ridge, bears S. 70° E. and
N. 70° W. Enter bottom of Nine Mile Canon.

30.00 Nine Mile Creek, 10 l s. wide, 5 ins. deep, course S. 80°
E.

40.00 Set a sandstone, 18x10x4 ins., 12 ins. in the ground,
for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound
of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits imprac-
- ticable. Francis' house bears N. 45° E. 1200 chs. dist.

44.50 Enter heavy cottonwood timber, bears N. W. and S. E.

45.00 Nine Mile creek, 10 lks. wide, 5 ins. deep, course N. 60°
E.

50.00 Leave timber, bears N. E. and S. W.

52.00 Leave canon bottom, bears N. E. and S. 60° W.

Ascend abruptly over a series of ledges.

61.00 Top of ridge, 500 ft. above canon, bears N. E. and S. W.

Descend over ledges.

80.00 Set a sandstone, 18x12x5 ins., 12 ins. in the ground,
for cor. of secs. 4, 5, 32, and 33, marked with 4 notches
on E. and 2 notches on W. edges; and raise a mound of
stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impractic-

 South boundary of T.11 S., R.15 E. -Continued.

Chains

able.

Land, mountainous.

Soil, white clay and gravelly; 3rd rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush and greasewood.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth, 80.00 chs.

East, on a true line bet. secs. 4 and 33.

Over mountainous land; through scattering timber and scattering undergrowth.

Ascend gradually along steep side hill.

29.00 Top of ridge, 200 ft. above sec. cor., bears N.E. and S.W.

Descend .

37.00 Bottom of hollow, 500 ft. below ridge, course N.E.

Ascend .

40.00 Set a sandstone, 18x8x4 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

41.00 Top of spur, 100 ft. above hollow, bears N. and S.

Descend .

51.40 Foot of descent, 150 ft. below spur, bears N. 60° W. and S. 30° E. Enter bottom of Nine Mile Canon.

57.90 Wire fence, bears N. 70° W. and S. 70° E. Enter cultivated field. (Claimed by Preston Nutter)

64.22 Wire fence, bears N. and S. Enter orchard.

67.50 Leave orchard and enter dense undergrowth, bears N. and S.

67.80 West side of wash, 30 ft. deep, course S. 60° E.

Creek, 2 lks. wide, 6 ins. deep, in bottom.

South Boundary of T.11 S., R.15 E. -Continued.

Chains

70.00 East side of wash, bears N.60°W. and S.60°E.

70.10 Water ditch, 2 lks. wide, course S.60°E.

71.10 Road in Nine Mile Canon, bears N.70°W. and S.70°E.

From this point Preston Nutter's house bears N.W. about 20.00 chs. dist.

78.50 Foot of mountain, bears N.W. and S.E.

Ascend .

80.00 Set a sandstone, 28x10x5 ins., 21 ins. in the ground, for cor. of secs. 3, 4, 33, and 34, marked with 3 notches on E. and 3 notches on W. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.

Land, mountainous and level canon bottom.

Soil, clay loam and gravelly; 2nd and 3rd rate.

Timber; cedar and pinon pine.

Undergrowth, sage brush and greasewood.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth, 83.90 chs.

September 1, 1902: At the noon hour the sky is overcast and solar observations are impossible.

East, on a true line bet. secs. 3 and 34.

Over mountainous land; through scattering undergrowth.

Ascend .

5.00 Top of ridge, 100 ft. above sec. cor., bears N. and S.

Descend .

15.25 Bottom of hollow, 200 ft. below ridge, course S.

Enter scattering timber.

Ascend .

25.00 Top of ridge, 250 ft. above hollow, bears N. and S.

Descend .

South Boundary of T.11 S., R.15 E. -Continued.

Chains

- 32.50 Bottom of hollow, 200 ft. below ridge, course S.
Ascend over a series of ledges, from 10 ft. to 100 ft. high.
- 40.00 Set a sandstone, 18x10x4 ins., 12 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; from which
- A pinon pine, 12 ins. diam., bears N. 85° E., 15 lks. dist., marked $\frac{1}{2}$ S. 34, B.T.
 - A pinon pine, 12 ins. diam., bears S. 10° W., 75 lks. dist., marked $\frac{1}{2}$ S. 3, B.T.
 - A ledge 10 ft. high bears N. 88° E., 55 lks. dist., on which 1 mark (+ B.O)
- 45.00 Top of ridge, 500 ft. above hollow, and 200 ft. above $\frac{1}{2}$ sec. cor., bears N. 20° E. and S. 20° W.
Descend .
- 50.00 Bottom of hollow, 200 ft. below ridge, course S. 20° W.
Ascend .
- 61.00 Top of ridge, 250 ft. above hollow, bears N. 20° W. and S. 20° E.
Leave ledges, bears with ridge.
Descend .
- 75.00 Top of perpendicular bluff 100 ft. high, bears N. and S.
- 80.00 Set a sandstone, 20x10x4 ins., 15 ins. in the ground, for cor. of secs. 2, 3, 34, and 35, marked with 2 notches on E. and 4 notches on W. edges; from which
- A pinon pine, 5 ins. diam., bears N. 48° E., 75 lks. dist., marked T.11 S., R.15 E., S. 35, B.T.
 - A pinon pine, 7 ins. diam., bears S. 5° E., 53 lks. dist., marked T.12 S., R.15 E., S. 2, B.T.
 - A pinon pine, 5 ins. diam., bears S. 55° W., 75 lks. dist., marked T.12 S., R.15 E., S. 3, B.T.
 - A pinon pine, 10 ins. diam., bears N. 80° W., 88 lks. dist., marked T.11 S., R.15 E., S. 34, B.T.
- Land, mountainous.

South boundary of T.11 S., R.15 E. -Continued.

Chains

Soil, gravelly and rocky; 3rd and 4th rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous land, 80.00 chs.

East, on a true line bet. secs. 2 and 35.

Over mountainous land; through scattering timber and scattering undergrowth.

Descend .

4.00 Bottom of canon, 100 ft. below sec. cor., course S. 20° W.
Ascend abruptly over ledges.

35.00 Top of ~~ascent~~ ascent, 800 ft. above canon, bears N. 20° E. and S. 20° W.

Leave ledges . Thence over level mesa. through dense undergrowth .

40.00 Set a sandstone, 14x8x6 ins., 9 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

54.00 Leave mesa, bears N. 30° E. and S. 30° W.

Descend .

60.50 Bottom of canon, 300 ft. below mesa, course S. 20° W.

Ascend .

76.00 Top of ascent, 300 ft. above canon, bears N. 10° E. and S. 20° W.

Thence over rolling mesa.

80.00 Set a sandstone, 28x8x7 ins., 21 ins. in the ground, for cor. of secs. 1, 2, 35, and 36, marked with 1 notch on E. and 5 notches on W. edges; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, E. of cor. Pits impracticable.

Land, mountainous and rolling mesa.

Soil, sandy loam and gravelly; 2nd and 3rd rate.

South boundary of T.11 S., R.15 E. -Continued.

Chains Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth, 80.00 chs.

East, on a true line bet. secs. 1 and 36.

Over rolling mesa; through dense undergrowth .

36.00 Leave mesa, bears N.W. and S.E.

Descend .

40.00 Set a sandstone, 18x9x8 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from which

A pinon pine, 8 ins. diam., bears N. 25° E., 60 lks. dist., marked $\frac{1}{4}$ S. 36, B.T.

A cedar, 6 ins. diam., bears S. 10° E., 50 lks. dist., marked $\frac{1}{4}$ S. 1, B.T.

60.00 Bottom of canon, 400 ft. below mesa, course S. 20° W.

Ascend .

80.00 Set a sandstone, 36x12x6 ins., 27 ins. in the ground, for cor. of Tps. 11 and 12 S., Rs. 15 and 16 E., marked 11 S. on N.E., 16 E. on S.E., 12 S. on S.W., and 15 E. on N.W. faces; with 6 notches on each edge; from which

A pinon pine, 12 ins. diam., bears N. 71° E., 211 lks. dist., marked T. 11 S., R. 16 E., S. 31, B.T.

A cedar, 10 ins. diam., bears S. 73° E., 187 lks. dist., marked T. 12 S., R. 16 E., S. 6, B.T.

A cedar, 6 ins. diam., bears S. 43° W., 22 lks. dist., marked T. 12 S., R. 16 E., S. 1, B.T.

No other trees within limits; raise a mound of stone, 2 ft. base, 1½ ft. high, S. of cor. Pits impracticable.

Land, mountainous and rolling mesa.

Soil, sandy and gravelly; 3rd arte.

Timber, cedar and pinon pine.

South boundary of T.11 S., R.15 E., Concluded.

Chains

Undergrowth, sage brush.

Good grass for grazing.

Mountainous land, or land covered with dense under-
growth, 80.00 chs.

September 1, 1902.

EAST BOUNDARY OF T.11 S., R.15 E.

September 2, 1902: At 7 h 2 m a.m., E.M.T., I set off
39° 49' N., on the lat. arc; 8° 10' N., on the decl. arc;
and determine a true meridian, with the solar, at
the cor. of Tps. 11 and 12 S., Rs. 15 and 16 E.

Thence I run

North, bet. secs. 31 and 36.

Over mountainous land; through scattering timber
and scattering undergrowth.

Descend .

20.00 Bottom of hollow, 200 ft. below Tp. cor., course W.

Ascend .

25.00 Top of ridge, 200 ft. above hollow, bears E. and W.

Descend .

32.00 Bottom of hollow, 200 ft. below ridge, course W.

Ascend .

36.00 Top of ascent, 200 ft. above hollow, bears E. and W.

Enter heavy timber.

Thence over level mesa.

40.00 Set a sandstone, 18x10x4 ins., 12 ins. in the ground,
for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which

A cedar, 7 ins. diam., bears S. 85° E., 54 lks.

dist., marked $\frac{1}{2}$ S. 31, B. T.

East boundary of T.11 S., R.15 E.-Continued.

- Chains A pinon pine, 3 ins. diam., bears N.78°W., 68
 lks. dist., marked $\frac{1}{2}$ S.36, B.T.
- 46.00 Leave mesa, bears E. and W.
 Leave timber, bears E. and W.
 Descend .
- 50.00 Bottom of hollow, 50 ft. below mesa, course W.
 Ascend .
- 54.00 Top of spur, 50 ft. above hollow, bears E. and W.
 Descend .
- 62.00 Bottom of canon, 200 ft. below spur, course S.20°W.
 Ascend .
- 79.50 Top of ascent 250 ft. above canon, bears N.E. and S.W.
 Thence over rolling mesa.
 Enter dense sage brush and shadscales.
- 80.00 Set a limestone, 18x12x4 ins., 12 ins. in the ground, for
 cor. of secs. 25, 30, 31, and 36, marked with 5 notches
 on N. and 1 notch on S. edges; and raise a mound of
 stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impractic-
 able.
 Land, mountainous and rolling mesa.
 Soil, sandy and clay; 3rd rate.
 Timber, cedar and pinon pine.
 Undergrowth, sage brush and shadscales.
 Good grass for grazing.
 Mountainous or heavily timbered land, or land covered
 with dense undergrowth, 80.00 chs.

North, bet. secs. 25 and 30.

Over rolling mesa; through dense undergrowth.

- 24.50 Leave mesa, bears N.E. and S.W.
 Ascend .
- 30.90 Top of ascent, 200 ft. above mesa, bears N.E. and S.W.
 Enter heavy timber, bears N.E. and S.W.
 Thence over rolling mesa.

East boundary of T.11 S., R.15 E.-Continued.

Chains

- 40.00 Set a sandstone, 18x12x5 ins., 12 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which
- A pinon pine, 10 ins. diam., bears N. 35° E., 90 lks. dist., marked $\frac{1}{2}$ S. 30, B.T.
- A pinon pine, 10 ins. diam., bears S. 88° W., 56 lks. dist., marked $\frac{1}{2}$ S. 25, B.T.
- 52.50 Leave timber, bears E. and W.
- 80.00 Set a sand coated limestone, 18x8x8 ins., 12 ins. in the ground, for cor. of secs. 19, 24, 25, and 30, marked with 4 notches on N. and 2 notches on S. edges; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
- Land, mountainous and rolling.
- Soil, sandy and clay; 3rd rate.
- Timber, cedar and pinon pine.
- Undergrowth, sage brush and shadscales.
- A very little grass.
- Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

North, bet. secs. 19 and 24.

- Over rolling mesa; through dense undergrowth.
- 37.00 Leave mesa, bears E. and W.
- Ascend through scattering timber.
- 40.00 Set a sandstone, 18x8x8 ins., 12 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which
- A pinon pine, 12 ins. diam., bears S. 80° E., 52 lks. dist., marked $\frac{1}{2}$ S. 19, B.T.
- A pinon pine, 12 ins. diam., bears S. 60° W., 36 lks. dist., marked $\frac{1}{2}$ S. 24, B.T.
- 46.25 Top of ridge, 100 ft. above mesa, bears E. and W.
- Descend over rolling hills.
- 80.00 Set a limestone, 30x12x4 ins., 22 ins. in the ground, for

East boundary of T.11 S., R.15 E.-Continued.

Chains cor. of secs. 13, 18, 19, and 24, marked with 3 notches on N. and 3 notches on S. edges; from which

A pinon pine, 12 ins. diam., bears S. 5° E., 53 lks. dist., marked T.11 S., R.16 E., S.19, B.T.

A pinon pine, 12 ins. diam., bears S. 43° W., 28 lks. dist., marked T.11 S., R.15 E., S.24, B.T.

A pinon pine, 12 ins. diam., bears N. 42° W., 75 lks. dist., marked T.11 S., R.15 E., S.13, B.T.

No other trees within limits; raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.

Land, mountainous and rolling mesa.

Soil, clay; 3rd rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush and shadscales.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth, 80.00 chs.

September 2, 1902: At this cor. I set off 8° 04' N., on the decl. arc; and at 0 h 2 m p.m., l.m.t., observe the sun on the meridian, the resulting lat. is 39° 52' N.

North, bet. secs. 13 and 18.

Over mountainous land; through scattering timber and scattering undergrowth.

Descend .

.25 Bottom of hollow, 10 ft. below sec. cor., course S. E.

Ascend .

15.50 Top of ridge, 200 ft. above hollow, bears N. W. and S. E.

Descend .

28.60 Bottom of hollow, 150 ft. below ridge, course East.

Ascend .

30.50 Top of ridge, 150 ft. above hollow, bears E. and W.

Descend .

40.00 Set a sandstone, 18x12x4 ins., 12 ins. in the ground, for

East boundary of T.11 S., R.15 E. -Continued.

Chains

$\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

42.00 Bottom of hollow, 200 ft. below ridge, course E.

Ascend .

45.00 Top of ridge, 200 ft. above hollow, bears N.W. and S.E.

Descend .

50.00 Bottom of hollow, 250 ft. below ridge, course S. 30° E.

Ascend .

71.75 Top of ridge, 300 ft. above hollow, bears N. 70° W. and

S. 60° E.

Descend .

80.00 Set a limestone, 36x12x6 ins., 27 ins. in the ground, for cor. of secs. 7, 12, 13, and 18, marked with 2 notches on N. and 4 notches on S. edges; from which

A pinon pine, 4 ins. diam., bears N. 80° E., 28 lks. dist., marked T.11 S., R.16 E., S. 7, B.T.

A pinon pine, 6 ins. diam., bears S. 12° E., 90 lks. dist., marked T.11 S., R.16 E., S. 18, B.T.

A pinon pine, 6 ins. diam., bears S. 30° W., 87 lks. dist., marked T.11 S., R.15 E., S. 13, B.T.

A cedar, 6 ins. diam., bears N. 75° W., 60 lks. dist., marked T.11 S., R.15 E., S. 12, B.T.

Land, mountainous.

Soil, sandy and clay; 3rd rate.

Timber, cedar and pinon pine.

Undergrowth sage brush.

A very little grass.

Mountainous land, 80.00 chs.

North, bet. secs. 7 and 12.

Over mountainous land; through scattering timber and scattering undergrowth.

Descend .

 East boundary of T.11 S., R.15 E. -Continued.

Chains

- 22.00 Bottom of hollow, 200 ft. below sec. cor., course S.E.
Ascend .
- 37.50 Top of divide ridge between Nine Mile Canon and the
DuChesne valley, 300 ft. above hollow, bears E. and W.
Enter heavy timber, bears with ridge.
Descend gradually.
- 40.00 Set a sandstone, 18x10x12 ins., 12 ins. in the ground,
for $\frac{1}{2}$ sec. cor., marked with $\frac{1}{2}$ on W. face; from which
A cedar, 12 ins. diam., bears S. 80° E., 50 lks.
dist., marked $\frac{1}{2}$ S. 7, B.T.
A cedar, 8 ins. diam., bears W., 180 lks. dist.,
marked $\frac{1}{2}$ S. 12, B.T.
- 41.00 Leave heavy and enter scattering timber, bears
N. 10° E. and S. 10° W.
- 80.00 Set a sandstone, 18x14x4 ins., 12 ins. in the ground,
for cor. of secs. 1, 6, 7, and 12, marked with 1 notch on
N. and 5 notches on S. edges; from which
A cedar, 6 ins. diam., bears N. 50° E., 100 lks.
dist., marked T. 11 S., R. 16 E., S. 6, B.T.
A cedar, 5 ins. diam., bears S. 45° E., 80 lks.
dist., marked T. 11 S., R. 16 E., S. 7, B.T.
A cedar, 7 ins. diam., bears S. 60° W., 280 lks.
dist., marked T. 11 S., R. 15 E., S. 12, B.T.
A cedar, 9 ins. diam., bears N. 35° W., 195 lks.
dist., marked T. 11 S., R. 15 E., S. 1, B.T.

Land, mountainous.

Soil, clay; 3rd rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

A very little grass .

Mountainous or heavily timbered land, 80.00 chs.

North, bet. secs. 1 and 6.

East boundary of T.11 S., R.15 E. -Continued.

Chains Over mountainous land; through scattering undergrowth and scattering timber.

Descend .

1.00 Bottom of hollow, course N.40° E.

Ascend .

26.00 Top of ridge, 100 ft. above hollow, bears N.E. and S.W.

Descend .

38.00 Bottom of hollow, 40 ft. below ridge, course N.E.

Ascend .

40.00 Set a sandstone, 18x10x4 ins., 12 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which

A cedar, 4 ins. diam., bears N.80° E., 82 lks. dist., marked $\frac{1}{4}$ S.6, B.T.

A cedar, 8 ins. diam., bears N.65° W., 53 lks. dist., marked $\frac{1}{2}$ S.1, B.T.

43.00 Top of ridge, 50 ft. above hollow, bears N.65° E. and S.65° W.

Descend .

49.20 Bottom of hollow, 50 ft. below ridge, course N.65° E.

Ascend .

53.00 Top of ridge, 50 ft. above hollow, bears N.65° E. and S.65° W. Descend gradually.

Descend gradually.

72.60 Bottom of hollow, 50 ft. below ridge, course N.W. Ascend.

74.60 Intersect, Second Standard Parallel South 9.56 chs.

West of the Standard cor. of Tps .10 S., Rs. 11 and 12 E., which is a sand stone 30x20x10 ins., above ground, firmly set and marked and witnessed and described by the surveyor general,

Note: From the above intersection I am led to believe that discrepancies exist in the Second Stand. Par. South through Range 15 E.; therefore I proceed to retrace the Parallel.

Note: The permanent closing cor. of Tps .11 S., Rs. 15

and 16 E. was set at 80.15 chs. north from cor. of secs. 1, 6, 7, and 12, and 11.00 chs. W. of the re-established Standard cor. of Tps. 10 S., Rs. 15 and 16 E. (and 10) described

East boundary of T.11 S., R.15 E. -Concluded.

Chains as a sandstone, 24x12x6 ins., 18 ins. in the ground, for closing cor. of Tps. 11 S., Rs. 15 and 16 E., marked C.C. 11 S. on S., 16 E. on E., and 15 E. on W. faces; with 6 grooves on S., E., and W. faces; and raise a mound of stone, 2 ft. base, 1½ ft. high, S. of cor. Pits impracticable.

Land, mountainous.

Soil, clay and sandy; 3rd rate.

A very little grass. Timber, cedar and pinon pine.

Mountainous land, 80.15 chs. September 2, 1902.

Note: There being no public or other officer, authorized to administer oaths, within reasonable distance, at the beginning or ending of this survey; in order to ^{SAVE} time and expense I administer the preliminary and final oaths myself.

Boundaries of T.11 S., R.15 E.

Latitudes, departures, and closing errors.

Line designated	true bearing	dist- ance chs.	Latitudes		Departures	
			N. chs.	S. chs.	E. chs.	W. chs.
W.bdy. T.11 S., R.15 E.	North	480.48 [✓]	480.48 [✓]			
N.bdy. T.11 S., R.15 E.	East	478.00 [✓]			478.00 [✓]	
E.bdy. T.11 S., R.15 E.	South	480.15 [✓]		480.15 [✓]		
S.bdy. T.11 S., R.15 E.	West	477.60 [✓]				477.60 [✓]
Convergency						.30
Totals			480.48	480.15	478.60	477.60 [✓]
Error in lat.			480.15			
			.33		477.60 [✓]	
Error in dep.						1.00 [✓]

This township is very rough in the southern part and rolling in the northern part. It is well adapted for winter grazing and should be subdivided.

John R Stewart
U.S. Deputy Surveyor.

September 2, 1902.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by John R. Stewart

..... United States Deputy Surveyor, to assist in running, measuring, and

marking the lines and corners described in the foregoing field notes of the survey of the East and

North bdy. T. 13 S., R. 14 E.; the East and fractional N. bdy. T. 12 S., R. 14 E. and
The West, South, and East bdy. T. 11 S., R. 15 E. of the Salt Lake Base & Meridian, etc.
showing the respective capacities in which they acted:

- Hyrum G. Smith Chairman.
- John G. Smith Chairman.
- Jacob A. Acord Moundman.
- Edwin A. Peay Moundman.
- Joseph A. Passey Axman.
- Andy J. Stewart Axman.
- Otto R. Stewart Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted John R. Stewart

..... United States Deputy Surveyor, in surveying all

those parts or portions of the East and North boundaries of T. 13 S., R. 14 E.; the
East and fractional North boundaries of T. 12 S., R. 14 E. and the West,
South, and East bdy. T. 11 S., R. 15 E.

..... of the Salt Lake

Base and meridian, Utah of Utah

which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah

- Hyrum G. Smith Chairman.
- John G. Smith Chairman.
- Jacob A. Acord Moundman.
- Edwin A. Peay Moundman.
- Joseph A. Passey Axman.
- Andy J. Stewart Axman.
- Otto R. Stewart Flagman.

Subscribed and sworn to before me this 16th }
day of September, ~~189~~ 1902 }



John R. Stewart
U. S. Deputy Surveyor

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, John R. Stewart, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Edward H. Anderson United States Surveyor General for The State of Utah, bearing date of the 2 day of January 1902, 189, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for The State of Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of The East-North Boundaries of T135 R14 E. The East & fractional North Boundaries of T125 R14 E. and the West-South-East Boundaries of T115 R15 East of the Salt Lake Base and meridian in the State of Utah, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for The State of Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

John R. Stewart
United States Deputy Surveyor.

Subscribed by said John R. Stewart, and sworn to before me }
this 2 day of January 1902

Edward H. Anderson
U.S. Surveyor-General for
Utah.



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL.

Salt Lake City, Utah, Jan 18, 1902, 189

The foregoing field notes of the survey of The South East West Boundaries of Township 11 South Range 15 East of the Salt Lake Base & Meridian, Utah

executed by John R. Stewart under his contract No. 250, dated January 2, 1902, 189, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Edward H. Anderson
United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General.

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4-679.

N.

BOOK A-294

*Filed Jan 21-1903
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2-15-03
JH*

FIELD NOTES

72.8.03

XXXXXXXXXXXXXXXXXXXXXXXXXXXX

ON THE RETRACEMENT AND RESURVEY OF THE

SECOND STANDARD PARALLEL SOUTH,

through

Range 15 East

Of the SALT LAKE BASE AND Meridian,

in the STATE OF UTAH.

AS SURVEYED BY

John R. Stewart, United States Deputy Surveyor,

Under his Contract No. 250, dated January 2, 1902., 1889

Re-Survey commenced September 3, 1902., 1889

Re-Survey completed September 5, 1902., 1889

Exp 6,0000

NAMES AND DUTIES OF ASSISTANTS.

Hyrum G. Smith Chainman

John G. Smith Chainman

Jacob A. Acord Chainman

Edwin A. Peay Chainman

Joseph A. Passey Moundman

Andy J. Stewart Axman

Otto R. Stewart Flagman

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Meanders Page _____

PRELIMINARY OATHS OF ASSISTANTS.

WE, Hyrum G. Smith, Jacob A. Acord, John G. Smith, and Edwin A. Pray do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the ~~survey of~~ retracement and resurvey of the Second Standard Parallel South, through Range 15 East of the 1st 1/2 Sec 36 T. 20 N. R. 15 E. 1st 1/2 Sec 36 T. 20 N. R. 15 E.

Hyrum G. Smith, Chainman.

John G. Smith, Chainman.

Jacob A. Acord, Chainman

Edwin A. Pray, Chainman

Subscribed and sworn to before me this 15th day of June 1902,



WE, Joseph A. Passey and do solemnly swear that I will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the ~~survey of~~ retracement and resurvey of the Second Standard Parallel South, through Range 15 East of the 1st 1/2 Sec 36 T. 20 N. R. 15 E.

Joseph A. Passey, Moundman.

Subscribed and sworn to before me this 15th day of June 1902,



John R. Stewart,

U. S. Deputy Surveyor.

WE, O do solemnly swear that I will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the ~~survey of~~ retracement and resurvey of the Second Standard Parallel South, through Range 15 East of the 1st 1/2 Sec 36 T. 20 N. R. 15 E.

Andy J. Stewart,

Andy J. Stewart, Axman.

Subscribed and sworn to before me this 15th day of June 1902,



John R. Stewart,

U. S. Deputy Surveyor.

I, Otto R. Stewart, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the ~~survey of~~ retracement and resurvey of the Second Standard Parallel South, through Range 15 East of the 1st 1/2 Sec 36 T. 20 N. R. 15 E.

Otto R. Stewart, Flagman.

Subscribed and sworn to before me this 15th day of June 1902,



John R. Stewart,

U. S. Deputy Surveyor.

Retracement of the Second Parallel South, through Range 15 East.

Survey commenced September 3, 1902, and executed with a W. and L. E. Gurley light mountain transit, No. 1, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; with is also the least count of the latitude and declination arcs.

The instrument was examined, tested on the true meridian, at Salt Lake City, found correct, and was approved by the surveyor general for Utah, on June 14, 1902.

I examine the adjustments of the instrument and correct the level and collimation errors, then, to test the solar apparatus by comparing its indications resulting from solar observations made during p.m. and a.m. hours with a true meridian determined by observation on Polaris, I proceed as follows:

At the Standard cor. of Tps. 10 S., Rs. 15 and 16 E., heretofore described, longitude $110^{\circ}12'47''$ W., latitude $39^{\circ}54'$ N., I set off $39^{\circ}54'$ N., on the lat. arc; $7^{\circ}39'$ N., on the decl. arc; and at 4 h 2 m p.m., l.m.t., determine a true meridian, with the solar, and mark a point thereof on a stone firmly set in the ground, 5.00 chs. N. of the cor.

At 8 h 39 m p.m., l.m.t., I observe Polaris at eastern elongation, in accordance with the Manual, and mark a point in the line thus determined by a tack driven in a wooden plug, set in the ground, east of the stone already set 5.00 chs. N. of the cor.

September 3, 1902.

September 4, 1902: At 3 h 30' m a.m., l.m.t., I lay off the azimuth of Polaris $1^{\circ}34.3'$ to the west, and mark a point in the true meridian thus determined, by cutting

Retracement of Second Standard Parallel South, through R. 15 E. Cont.

Chains

a small groove in the stone already set 5.00 chs.

N. of the cor.; this mark falls 0.25 ins. east of the true meridian established by Solar observation.

At 7 h 3 m a.m., l.m.t., I set off $39^{\circ}54'N.$, on the ~~lat.~~ lat. arc; $7^{\circ}26'N.$, on the decl. arc; and mark a point in the true meridian determined with the solar, by a cross on the stone already set 5.00 chs. N. of the cor; this mark falls 0.21 ins. east of the true meridian determined by Polaris observation.

The solar apparatus by p.m. and a.m. observations defines positions for true meridians respectively about $0'13''$ west and $0'12''$ east of the true meridian, established by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 7 h 30 m a.m., l.m.t., is $16^{\circ}20.7'W.$, the angle thus determined reduced by the table page 100 of the Manual, gives the mean mag. decl. $16^{\circ}15'E.$

From the standard cor. of Tps. 10 S., Rs. 15 and 16 E., heretofore described

I run

West, on a retracement line on south bdy. sec. 36.

40.10 The standard $\frac{1}{2}$ sec. cor. on S. side sec. 36, which is a sandstone, $6x8x8$ ins., above ground, firmly set, and marked and witnessed as described by the surveyor general, bears N. 48 lks. dist.

79.80 The cor. of secs. 1, 2, 35, and 36, which is a sandstone, $6x10x7$ ins., above ground, firmly set, and marked and witnessed as described by the surveyor general, bears North 92 lks. dist.

West, on retracement line on S. side sec. 35.

Retracement of Second Standard Parallel South, through R. 15 E.

Chains

- 39.88 The standard $\frac{1}{2}$ sec. cor. on S. side sec. 35, which is a cedar, 4 ins. diam., marked and witnessed as described by the surveyor general, bears North 45 lks. dist.
- 79.74 The standard cor. of secs. 34 and 35, which is a sandstone, 5x10x6 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general, bears North, 92 lks. dist.

West, on a retracement line on S. side sec. 34.

- 39.92 The standard $\frac{1}{2}$ sec. cor., on S. side sec. 34, which is a sandstone, 6x10x5 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general, bears North 46 lks. dist.
- 79.90. The standard cor. of secs. 33 and 34, which is a sandstone, 5x10x8 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general, bears North 90 lks. dist.

West, on a retracement line on south side sec. 33.

- 39.88 The standard $\frac{1}{2}$ sec. cor., on south side sec. 33, which is a pine, 20 ins. diam., marked and witnessed as described by the surveyor general, bears North 44 lks. dist.
- 79.78 The standard cor. of secs. 32 and 33, which is a sandstone, 6x9x8 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general, bears North 96 lks. dist.
-

Retracement of Second Standard Parallel South, through Range 15 E.

Chains

West, on retracement line on South side sec. 32.

- 39.79 The standard $\frac{1}{2}$ sec. cor., on South side sec. 32, which is a sandstone, 6x8x6 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general, bears North 50 lks. dist.
- 79.84 The standard cor. of secs. 31 and 32, which is a sandstone, 6x14x6 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general, bears North, 94 lks. dist.

West, on a retracement line on South side sec. 31.

- 39.87 The standard $\frac{1}{2}$ sec. cor., on south side sec. 31, which is a sandstone, 4x10x5 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general, bears North 44 lks. dist.
- 79.50 The standard cor. of Tps. 10 South Rs. 14 and 15 E., heretofore described, bears North, 91 lks. dist.

Note: On account of the discrepancies existing in this parallel I deem it necessary, in accordance with

Special Instructions, to resurvey the Parallel just retraced, as follows:

September 4, 1902: At the noon hour the sky is overcast and solar observations are impossible.

RESURVEY OF SECOND PARALLEL SOUTH, THROUGH RANGE 15 EAST.

From the standard cor. of Tps. 10 S., 5s. 14 and 15 E., heretofore described,

I run

Resurvey of Second Standard Parallel South, through Range 15 E. -Contd.

Chains

East, on a resurvey line on South side sec. 31.

Over mountainous land; through scattering timber.

Ascend .

5.00 Top of ridge, 50 ft. above Tp. cor., bears N.E. and S.W.

Descend .

11.25 Bottom of hollow, 50 ft. below ridge, course N.E.

Ascend .

15.50 Top of ridge, 75 ft. above hollow, bears N. 30° E. and S. 30° W.

Descend .

20.00 Bottom of hollow, 40 ft. below ridge, course N. 35° E.

Ascend .

26.00 Top of ridge, 100 ft. above hollow, bears N.E. and S.W.

Descend .

37.25 Bottom of hollow, 75 ft. below ridge, course N.E.

Ascend .

Difference between measurements of 40.00 chs., by two sets of chainmen, is 6 lks.; position of middle point,

By 1st set 39.97 chs.

By 2nd set 40.03 chs., the mean of which is

40.00 Set a sandstone, 18x7x6 ins., 12 ins. in the ground, for standard $\frac{1}{4}$ sec. cor. marked S.C. $\frac{1}{4}$ on N. face; from which

A pinon pine, 6 ins. diam., bears N. 68° E., 30 lks. dist., marked S.C. $\frac{1}{4}$ S. 31, B.T.

A pinon pine, 5 ins. diam., bears N. 35° W., 54 lks. dist., marked S.C. $\frac{1}{4}$ S. 31, B.T.

The old standard $\frac{1}{4}$ sec. cor. bears S. 58° 50' W., 59 lks. dist.

I destroy all traces of the old cor.

44.50 Top of ridge, 100 ft. above hollow, bears N. 50° E. and S. 50° W.

Descend .

45.00 Bottom of hollow, 100 ft. below ridge, course N.W.

Ascend .

Resurvey of the Second Standard Parallel South, through R. 15 E. Cont

Chains

80.30 Top of ridge, 100 ft. above hollow, bears N. 10° W. and
S. 10° E.

Descend .

77.00 Bottom of hollow, 50 ft. below ridge, course N.

Ascend .

Difference between measurements of 80.00 chs., by
two sets of chainmen, is 10 lks., position of middle
point,

By 1st set 79.95 chs.

By 2nd set 80.05 chs., the mean of which is

80.00 Set a sandstone, 18x14x8 ins., 12 ins. in the ground, for
standard cor. of secs. 31 and 32, marked ~~S.C. or N~~ with 5 grooves
on E. and 1 groove on W. faces; from which

A cedar, 6 ins. diam., bears N. 60° E., 56 lks.

dist., marked S.C.T. 10 S., R. 15 E., S. 32, B.T.

A cedar, 8 ins. diam., bears N. 49° W., 76 lks.

dist., marked S.C.T. 10 S., R. 15 E., S. 31, B.T.

The old standard cor. bears S. ~~91 lks. and W. 50 lks.~~ dist.

I destroy all traces of the old cor.

Land, mountainous.

Soil, sandy and gravelly; 3rd rate.

Timber, cedar and pinon pine.

Good grass for grazing.

Mountainous land, 80.00 chs.

East, on S. side sec. 32.

Over rolling mountainous land, through scattering
timber.

Ascend .

2.75 Top of ridge, 75 ft. above sec. cor., bears N. and S.

Descend .

Resurvey of Second Standard Parallel South, through Range 15 E., Cont.

Chains

- 12.00 Bottom of hollow, 75 ft. below ridge, course N.
Ascend .
- 18.50 Edge of flat top ridge, 100 ft. above hollow, bears
N. and S. thence across ridge.
- 25.50 Leave ridge, bears N. and S. Descend .
- 39.45 The old standard $\frac{1}{2}$ sec. cor., bears S. 135 lks. dist.
I destroy all traces of the old standard $\frac{1}{2}$ sec. cor.
Difference between measurements of 40.00 chs., by
two sets of chainmen, is 8 lks., position of middle
point
By 1st set 39.96 chs.
By 2nd set 40.04 chs., the mean of which is
- 40.00 Set a sandstone, 18x9x7 ins., 12 ins. in the ground, for
standard $\frac{1}{2}$ sec. cor., marked S.C. $\frac{1}{2}$ on N. face; from
which
A cedar, 8 ins. diam., bears N. 60° E., 80 lks.
dist., marked S.C. $\frac{1}{2}$ S. 32, B.T.
A pinon pine, 19 ins. diam., bears N. 34° W., 7
lks. dist., marked S.C. $\frac{1}{2}$ S. 32, B.T.
- 43.00 Bottom of hollow, 100 ft. below ridge, course S.E.
Ascend .
- 49.50 Edge of flat top ridge, 100 ft. above hollow, bears N.
20° W. and S. 20° E. Thence across ridge.
- 62.00 Leave ridge, bears N. 20° W. and S. 20° E.
Descend .
- 69.00 Bottom of hollow, 125 ft. below ridge, course N.E.
Ascend .
- 79.34 The standard cor. of secs. 32 and 33, heretofore des-
cribed bears S. 185 lks. dist. I destroy all traces
of the cor.
Difference between measurements of 80.00 chs., by
two sets of chainmen, is 14 lks.; position of middle
point,
By 1st set 79.93 chs.
By 2nd set 80.07 chs., the mean of which is

Resurvey of Second Standard Parallel South, through Range 15 E. Cont.

Chains

- 80.00 Set a sandstone, 18x10x8 ins., 12 ins. in the ground for standard cor. of secs. 32 and 33, marked S.C. on N., with 4 grooves on E. and 2 grooves on W. faces; from which

A cedar, 8 ins. diam., bears N. 32° E., 44 lks. dist., marked S.C.T. 10 S., R. 15 E., S. 33, B.T.

A pinon pine, 9 ins. diam., bears N. 40° W., 40

lks. dist., marked S.C.T. 10 S., R. 15 E., S. 32, B.T.

Land, mountainous .

Soil, sandy and clay ; 3rd rate.

Timber, cedar and pinon pine.

Good grass for grazing.

Mountainous land, 80.00 chs.

East, on S. side sec. 33.

Over rolling mountainous land; through scattering timber.

Ascend .

.25 Top of ridge,, bears N. and S. Descend.

10.00 Price-Vernal road, bears N. and S. 10° E.

10.50 Bottom of hollow, 50 ft. below ridge, course N. Ascend.

11.00 Price-Fort Du Chesne Telephone line, bears N. and S. 10° E.

21.80 Top of ridge, 150 ft. above hollow, bears N. and S.

Descend.

29.00 Bottom of hollow, course N.W.

Ascend .

39.00 Top of ridge, 100 ft. above hollow, bears N. and S.

Descend .

39.24 The old standard $\frac{1}{2}$ sec. cor. on S. side sec. 33, heretofore described bears S. 237 lks. dist. I destroy all traces of the old cor.

Difference between measurements of 40.00 chs., by two sets of chainmen, is 6 lks.; position of middle

Resurvey of Second Standard Parallel South, through Range 15 E., CONT.

Chains point

By 1st set 39.96 chs.

By 2nd set 40.04 chs., the mean of which is

40.00 Set a sandstone, 18x7x5 ins., 12 ins. in the ground, for standard $\frac{1}{2}$ sec. cor., marked S.C. $\frac{1}{2}$ on N. face; from which

A pinon pine, 8 ins. diam., bears N.7°E., 20 lks dist., marked S.C. $\frac{1}{2}$ S.33, B.T.

A pinon pine, 9 ins. diam., bears N.50°W., 54 lks. dist., marked S.C. $\frac{1}{2}$ S.33, B.T.

41.00 Bottom of hollow, 50 ft. below ridge, course N.W.

Ascend .

46.50 Top of ridge, 100 ft. above hollow, bears N.W. and S.E.

Descend .

53.50 Bottom of hollow, 50 ft. below ridge, course N.

Ascend .

57.20 Top of ridge, 100 ft. above hollow, bears N. and S.

Descend .

70.00 Bottom of hollow, 75 ft. below ridge, course N.W.

Ascend .

76.00 Top of ridge, 75 ft. above hollow, bears N.W. and S.E.

Descend .

79.12 The old standard cor. of secs. 33 and 34, heretofore described, bears S.28l lks. dist. I destroy all traces of the old cor.

Difference between measurements of 80.00 chs., by two sets of chainmen, is 20 lks.; position of middle point,

By 1st set 79.90 chs.

By 2nd set 80.10 chs., the mean of which is

80.00 Set a sandstone, 19x7x5 ins., 12 ins. in the ground, for standard cor. of secs. 33 and 34, marked S.C. on N., with 3 grooves on E. and 3 grooves on W. faces; from which

A pinon pine, 9 ins. diam., bears N.60°E., 25 lks. dist., marked S.C.T.10 S., R.15 E., S.34, BT

Resurvey of Second Standard Parallel South, through Range 15 E., Cont.

Chains A cedar, 9 ins. diam., bears N. 59° W., 40 lks.
 dist., marked S.C.T. 10 S., R. 15 E., S. 33, B.T.
 Land, mountainous .
 Soil, sandy and gravelly; 3rd rate.
 Timber, cedar and piñon pine.
 Good grass for grazing.
 Mountainous land, 80.00 chs.

September 4, 1902.

September 5, 1902. At 7 h 4^m a.m., l.m.t., I set
 off 39° 54' N., on the lat. arc; 7° 04' N., on the decl. arc;
 and determine a true meridian with the solar, at the
 cor. of secs. 33 and 34 .

Thence I run

East, on S. side sec. 34 .

Over mountainous land; through scattering timber .

Descend .

1.00 Enter bottom of hollow, bears N.W. and S.E.

6.00 Wash, 10 lks. wide in bottom of hollow, course N.W.

9.00 Leave hollow, bears N.W. and S.E.

Ascend .

20.00 Top of ridge, 100 ft. above hollow, bears N.E. and S.W.

Descend .

39.10 The standard $\frac{1}{2}$ sec. cor. on S. side sec. 34, heretofore
 described, bears S. 325 lks. dist. I destroy all traces
 of the old cor.

Difference between measurements of 40.00 chs., by
 two sets of chainmen in 12 lks.; position of middle
 point,

By 1st set 39.94 chs.

By 2nd set 40.06 chs., the mean of which is

40.00 Set a sandstone, 18x5x5 ins., 12 ins. in the ground, for
 standard $\frac{1}{2}$ sec. cor., marked S.C. $\frac{1}{2}$ on N. face; from which
 A cedar, 8 ins. diam., bears N. 14° E., 34 lks.

Resurvey of Second Standard Parallel South, through Range 15 E., Cont.

Chains dist., marked S.C. \pm S.34, B.T.

A pinon pine, 12 ins. diam., bears N.32°W., 57

lks. dist., marked S.C. \pm S.34, B.T.

46.50 Bottom of hollow, 100 ft. below ridge, course N.E.

Ascend .

57.00 Top of ridge, 125 ft. above hollow, bears N.E. and S.W.

Descend .

61.00 Enter bottom of hollow, course N.E.

79.02 The standard cor. of secs. 34 and 35, heretofore described bears S.371 lks. dist., I destroy all traces of the old cor.

Difference between measurements of 80.00 chs., by two sets of chainman, is 16 lks.; position of middle point,

By 1st set 79.92 chs.

By 2nd set 80.08 chs.; the mean of which is

80.00 Set a sandstone, 18x8x8 ins., 12 ins. in the ground, for standard cor. of secs. 34 and 35, marked S.C. on N., with 2 grooves on E. and 4 grooves on W. faces; from which

A pinon pine, 9 ins. diam., bears N.50°E., 6 lks. dist., marked S.C.T. 10 S., R. 15 E., S. 35, B.T.

A cedar, 12 ins. diam., bears N.25°W., 15 lks. dist., marked S.C.T. 10 S., R. 15 E., S. 34, B.T.

Land, mountainous.

Soil, sandy and gravelly; 3rd rate.

Timber, cedar and pinon pine.

Good grass for grazing.

Mountainous land, 80.00 chs.

East, on S. side sec. 35.

Over mountainous land; through scattering timber.

Along bottom of flat hollow.

1.00 Leave hollow, bears N.E. and S.W. (Course N.E.)

Ascend .

Resurvey of Second Standard Parallel South, trough Range 15 E., Cont.

Chains

12.00 Top of ridge, 50 ft. above hollow, bears N.E. and S.W.

Descend .

23.50 Bottom of hollow, 100 ft. below ridge, course N.

Ascend .

31.00 Top of ridge, 75 ft. above hollow, bears N.E. and S.W.

Descend .

38.92 The old standard $\frac{1}{2}$ sec. cor., on south side sec. 35, heretofore described, bears S. 418 lks. dist., I destroy all traces of the old cor.

Difference between measurements of 40.00 chs., by two sets of chainmen, is 12 lks.; position of middle point,

By 1st set 39.94 chs.

By 2nd set 40.06 chs.; the mean of which is

40.00 Set a sandstone, 18x9x7 ins., 12 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked S.C. $\frac{1}{2}$ on N. face; from which

A pinon pine, 12 ins. diam., bears N. 15° E., 2 lks. dist., marked S.C. $\frac{1}{4}$ S. 35, B.T.

A pinon pine, 9 ins. diam., bears N. 35° W., 40 lks. dist., marked S.C. $\frac{3}{4}$ S. 35, B.T.

48.00 Bottom of hollow, 50 ft. below ridge, course N.E.

Ascend .

55.00 Top of ridge, 125 ft. above hollow, bears N.E. and S.W.

Descend .

60.00 Enter bottom of hollow, course N.E.

78.76 The standard cor. of secs. 35 and 36, heretofore described, bears S. 463 lks. dist. I destroy all traces of the old cor.

Difference between measurements of 80.00 chs., by two sets of chainmen, is 22 lks.; position of middle point,

By 1st set 79.89 chs.

By 2nd set 80.11 chs.; the mean of which is

80.00 Set a sandstone, 18x8x7 ins., 12 ins. in the ground, for standard cor. of secs. 35 and 36, marked S.C. on N., with

Resurvey of Second Standard Parallel South, through Range 15 E., -Coot.

Chains 1 groove on E. and 5 grooves on W. faces; from which
 a cedar, 9 ins. diam., bears N. 47° E., 38 lks.
 dist., marked S.C.T. 10 S., R. 15 E., S. 36, B.T.
 a pinon pine, 12 ins. diam., bears N. 56° W., 60
 lks. dist., marked S.C.T. 10 S., R. 15 E., S. 35, B.T.

Land, mountainous.

Soil, sandy and gravelly; 3rd rate.

Timber, cedar and pinon pine.

Good grass for grazing.

Mountainous land, 80.00 chs.

East, on S. side sec. 36.

Over mountainous land; through scattering timber.

In bottom of hollow.

2.00 Leave bottom of hollow, bears N.E. and S.W.

Ascend .

22.00 Top of ridge, 100 ft. above hollow, bears N.E. and S.W.

Descend .

24.00 Bottom of hollow, 75 ft. below ridge, course S.E.

Ascend .

38.46 The Standard $\frac{1}{4}$ sec. cor., on S. side sec. 36, heretofore
 described, bears S. 509 lks. dist. I destroy all traces
 of the cor.

Difference between measurements of 40.00 chs., by
 two sets of chainmen, is 6 lks.; position of middle
 point,

By 1st set 39.97 chs.

By 2nd set 40.03 chs.; the mean of which is

40.00 Set a sandstone, 18x8x4 ins., 12 ins. in the ground, for
 standard $\frac{1}{4}$ sec. cor., marked S.C. $\frac{1}{4}$ S. 36, B.T.
 from
 which

A cedar, 9 ins. diam., bears N. 7° E., 7 lks.

dist., marked S.C. $\frac{1}{4}$ S. 36, B.T.

A cedar, 9 ins. diam., bears N. 34° W., 67 lks.

Resurvey of Second Standard Parallel South, through Range 15 E. Cont.

Chains dist., marked S.C. $\frac{1}{2}$ S. 36, B.T.

52.50 Bottom of hollow, course N.E.

Ascend .

63.00 Top of ridge, 100 ft. above hollow, bears N.E. and
S.W.

Descend .

67.00 Bottom of hollow, 125 ft. below ridge, course N.W.

Ascend .

69.00 To point which is 5.55 chs. North of the temp. closing
cor. of Tps. 11 S., Rs. 15 and 16, established from south.
At this point I

Set a sandstone, 24x12x6 ins., 18 ins. in the ground,
for closing cor. of Tps. 11 S., R. 15 and 16 E., marked
C.C. 11 S., on S., 16 S., on E., and 15 E. on W. faces; with
6 grooves on E., S., and W., faces; and raise a mound
of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, S. of cor. Pits imprac-
ticable.

78.58 The old Standard cor. of Tps. 10 S., Rs. 15 and 16 S.,
heretofore described, bears S. 555 lks. I destroy
all traces of the old cor.

Difference between measurements of 80.00 chs., by
two sets of chainmen, is 14 lks.; position of middle
point,

By 1st set 79.95 chs.

By 2nd set 80.07 chs.; the mean of which is

80.00 Set a sandstone, 24x8x8 ins., 18 ins. in the ground,
for standard cor. of Tps. 10 S., Rs. 15 and 16 E., marked
S.C. 10 S., on N., 16 E. on E., and 15 E. on W. faces; with
~~6~~ *6* grooves on N., E., and W. faces.
from which

A cedar, 8 ins. diam., bears N. 40° E., 65 lks.

dist., marked S.C.T. 10 S., R. 16 E., S. 31, B.T.

A cedar, 3 ins. diam., bears N. 30° W., 70 lks.

dist., marked S.C.T. 10 S., R. 15 E., S. 36, B.T.

Land, mountainous.

Soil, sandy; 3rd rate.

Timber, cedar and pinon pine.

-15-

Resurvey of Second Standard Parallel South, through Range 15 E. -Concluded

Chains Good grass for grazing.

Mountainous land, 80.00 chs.

September 5, 1902: At the noon hour the sky is overcast and solar observations are impossible.

September 5, 1902.

There being no public or other officer, authorized to administer oaths, within reasonable distance at the beginning or ending of this survey, in order to save time and expense I administer the preliminary and final oaths myself.

GENERAL DESCRIPTION.

Townships 10 and 11 South Rs. 15 E. are generally rolling mountainous land, well timbered and well adapted for winter grazing, but they are not well watered.

John R. Stewart.

U.S. Deputy Surveyor.

September 5, 1902.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by John R. Stewart United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the ~~survey~~ retracement and resurvey of the Second Standard Parallel South, through Range 15 East of the Salt Lake Meridian in Utah showing the respective capacities in which they acted:

- Hyrum G. Smith Chainman.
John G. Smith Chainman.
Jacob A. Acord Chairman Foundman.
Edwin A. Peay Chairman Foundman.
Joseph A. Passery Assessor Assman.
Andy J. Stewart Axman.
Otto R. Stewart Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted John R. Stewart United States Deputy Surveyor, in surveying all those parts or portions of the retracement and resurvey of the Second Standard Parallel South, through Range 15 East of the Salt Lake Meridian, State of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah

- Hyrum G. Smith Chainman.
John G. Smith Chainman.
Jacob A. Acord Chairman Foundman.
Edwin A. Peay Chairman Foundman.
Joseph A. Passery Assessor Assman.
Andy J. Stewart Axman.
Otto R. Stewart Flagman.

Subscribed and sworn to before me this 16th day of September 1902, 189

John R. Stewart U. S. Deputy Surveyor



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, John R. Stewart United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Edmond J. Anderson United States Surveyor General for The State of Utah, bearing date of the 2nd day of January 1902, 189, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for The State of Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of The Second Standard Parallel South through Range 15 East

Sal Lake of the Sal Lake Base and meridian, in the State of Utah, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for The State of Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

John R. Stewart
United States Deputy Surveyor.

Subscribed by said John R. Stewart, and sworn to before me }
this 2nd day of January 1902, 189



Edward H. Anderson
U.S. Surveyor General for
Utah

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Sal Lake by Utah January 18 1904, 189
The foregoing field notes of the survey of The Second Standard Parallel South through Range 15 East of the Sal Lake Base & Meridian, Utah

executed by John R. Stewart
under his contract No. 200, dated January 2 1902, 189, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Edward H. Anderson
United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General.

Filed Jan 25 1903
10/16 (377)
[Signature]

[Handwritten scribble]

FIELD NOTES

OF THE SURVEY OF THE

J. S. D.

SUBDIVISION

of

Township No. 11 South, Range No. 15 East,

Of the SALT LAKE BASE AND Meridian,

in the STATE OF UTAH.

AS SURVEYED BY

John R. Stewart, United States Deputy Surveyor,

Under his Contract No. 250, dated January 2, 1902, ~~1892~~

Survey commenced September 5, 1902, ~~1892~~

Survey completed September 17, 1902, ~~1892~~

High 59 64 34'
Low 8 15'
Close 43 08'

19 72-49

NAMES AND DUTIES OF ASSISTANTS.

Hyrum G. Smith Chainman

John G. Smith Chainman

Jacob A. Acord Moundman

Edwin A. Peay Moundman

Joseph A. Passey Axman

Andy J. Stewart Axman

Otto R. Stewart Flagman

In preliminary affidavits see book A G. R. S. P. E.

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Meanders Page _____

PRELIMINARY OATHS OF ASSISTANTS.

WE, _____ and _____
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of _____

_____, *Chainman.*
_____, *Chainman.*

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of _____

_____, *Moundman.*
_____, *Moundman.*

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of _____

_____, *Axman.*
_____, *Axman.*

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



I, _____, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of _____

_____, *Flagman.*

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



Subdivision of T.11 S., R.15 E.

Survey commenced September 5, 1902, and executed with a W. and L. E. Gurley light mountain transit, No. 1, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other reading to single minutes of arc; which is the least count of the latitude and declination arcs.

The instrument was examined, tested on the true meridian, at Salt Lake City, found correct, and was approved by the surveyor general for Utah, on June 14, 1902.

I examine the adjustments of the instrument, and correct the level and collimation errors, then, to test the solar apparatus by comparing its indications resulting from solar observations made during p.m. and a.m. hours, with a true meridian established by observation on Polaris, I proceed as follows:

At the cor. of secs. 1, 2, 35, and 36, on S. bdy. of Tp., heretofore described, latitude $39^{\circ}49'N.$, longitude $110^{\circ}13'54''W.$, I set off $39^{\circ}49'N.$, on the lat. arc; $6^{\circ}54'N.$, on the decl. arc; and at 4 h 2 m p.m., l.m.t., determine a true meridian, with the solar, and mark a point thereof on a stone, set firmly in the ground, 5.00 chs. N. of the cor.

At 8 h 31 m p.m., l.m.t., I observe Polaris at eastern elongation, in accordance with the Manual, and mark a point in the line thus determined, by a tack driven in a wooden plug set in the ground, east of the stone already set 5.00 chs. N. of the cor.

September 5, 1902

September 6, 1902: At 6 h 50 m a.m., l.m.t., I lay off the azimuth of Polaris $1^{\circ}34.8'$ to the west, and mark a point in the true meridian established by observation on Polaris by cutting a small groove in

Subdivision of T.11 S., R.15 E. -Continued.

Chains : the stone already set 5.00 chs.N.of the cor.;this mark falls 0.30 ins.east of the true meridian established with the solar.

At 7 h 3 m a.m.,l.m.t.,I set off $39^{\circ}49'N.$,on the lat.arc; $6^{\circ}42'N.$,on the decl.arc;and mark a point in the true meridian determined with the solar,by a cross on the stone already set;5.00 chs.N.of the cor.; this mark falls 0.36 ins.east of the true meridian established by Polaris observation.

The solar apparatus by p.m.,and a.m.observations defines positions for true meridians respectively, about $0'16''$ west, and $0'18''$ east of the true meridian established by Polaris observation;therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 7 h 30 m a.m.,l.m.t., $16^{\circ}20.7'W.$,the angle thus determined reduced by the table page 100 of the Manual gives the mean mag.decl. $16^{\circ}15'E.$

From the cor.of secs.1,2,35,and 36,on S.bdy.of Tp., heretofore described I run

$N.0^{\circ}01'W.$,bet.secs.35and 36.

Over rolling mesa land;through dense shadscales and sage brush.

- 40.00 Set a sandstone,30x8x4 ins.,22 ins.in the ground,for $\frac{1}{2}$ sec.cor.,marked $\frac{1}{2}$ on W.face;and raise a mound of stone,2 ft.base, $1\frac{1}{2}$ ft.high,W.of cor.Pits impracticable.
- 59.00 Leave mesa,bears E.and W.
Enter scattering timber,bears E.and W.
Descend .
- 73.90 Bottom of hollow,100 ft.below mesa,course W.
Ascend .
- 78.00 Top of ascent,edge of mesa,bears E.and W.

 Subdivision of T.11 S., R.15 E. -Continued.

Chains

80.00 Set a sandstone, 36x8x5 ins., 27 ins. in the ground, for cor. of secs. 25, 26, 35, and 36, marked with 1 notch on S. and 1 notch on E. edges; from which

A pinon pine, 10 ins. diam., bears N. 40° W., 100
lks. dist. marked T.11 S., R.15 E., S. 26, B.T.

No other trees within limits; raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.

Land, mountainous and rolling mesa.

Soil, sandy and clay; 3rd rate.

Timber, scattering cedar and pinion pine.

Undergrowth, sage and shadscales.

A very little grass.

Mountainous land, or land covered with dense undergrowth, 80.00 chs.

East, on a random line bet. secs. 25 and 36.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.98 Intersect E. bdy. of Tp., at the cor. of secs. 25, 30, 31, and 36, heretofore described.

Thence I run

West, on a true line bet. secs. 25 and 36.

Over rolling mesa; through dense sage bursh and shadscales.

32.10 Leave mesa, bears N. 20° E. and S. 20° W.

Descend .

35.75 Bottom of canon, 200 ft. below mesa, course S. 20° W.

Ascend .

39.99 Set a sandcoated limestone, 18x10x4 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec cor., marked $\frac{1}{4}$ on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.

40.05 Top of ascent, 200 ft. above canon, bears N. 20° E. and

Subdivision of T.11 S., R.15 E. -Continued.

Chains S.20°W.

Thence over rolling mesa.

79.98 The cor. of secs. 25, 26, 35, and 36.

Land, mountainous and rolling mesa.

Soil, sandy and clay and rocky; 3rd and 4th rate.

No timber.

Undergrowth, sage brush and shadscales.

Good grass on about 10.00 chs. across canon.

Mountainous land, or land covered with dense undergrowth, 79.98 chs.

N.0°01'W., bet. secs. 25 and 26.

Over rolling mesa, through dense undergrowth.

Gently ascending.

36.00 Leave mesa, bears N.E. and S.W.

Descend.

40.00 Set a sandstone, 30x10x4 ins., 22 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{2}$ on W. face; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

40.90 Bottom of canon, 100 ft. below mesa; course S.W.

Ascend gradually.

79.00 Top of ascent, 300 ft. above canon, bears N.E. and S.W.

Thence over rolling mesa.

80.00 Set a sandstone, 18x8x6 ins., 12 ins. in the ground, for cor. of secs. 23, 24, 25, and 26, marked with 2 notches on S. and 1 notch on E. edges; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, mountainous and rolling mesa.

Soil, sandy and clay and gravelly; 3rd rate.

No timber.

Undergrowth, sage brush and shadscales.

Good grass for grazing on north half mile.

 Subdivision of T.11 S., R.15 E. -Continued.

Chains Mountainous land, or land covered with dense undergrowth, 80.00 chs.

At this cor. I set Off $6^{\circ}36'N.$, on the decl. arc; and at Oh 3 m p.m., l.m.t., observe the sun on the meridian the resulting lat. is $39^{\circ}50'N.$

East, on a random line bet. secs. 24 and 25.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

79.94 Intersect E. bdy. of Tp., at the cor. of secs. 19, 24, 25, and 30, heretofore described.

Thence I run

West, on a true line bet. secs. 24 and 25.

Over rolling mesa; through dense undergrowth.

39.97 Set a sandstone, 30x10x5 ins., 22 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

54.50 Leave mesa, bears N.E. and S.W.

Descend abruptly.

68.70 Bottom of canon, 300 ft. below mesa, course S. 20° W.

Ascend .

79.00 Top of ascent, 300 ft. above canon, bears N.E. and S.W.

Thence over rolling mesa.

79.94 The cor. of secs. 23, 24, 25, and 26.

Land, mountainous and rolling mesa.

Soil, sandy and rocky; 3rd and 4th rate.

Undergrowth, sage brush and shadscales.

No timber.

No grass .

Mountainous land, or land covered with dense undergrowth, 79.94 chs.

N. $0^{\circ}01'W.$, bet. secs. 23 and 24.

Subdivision of T.11 S., R.15 E. -Continued.

- Chains Over rolling mesa; through dense undergrowth;
- 4.00 Enter scattering timber, bears E. and W.
- 31.60 Old road, bears E. and W.
- 37.00 Leave mesa, bears E. and W.
- Ascend .
- 40.00 Set a sandstone, 24x12x4 ins., 18 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; from which
- A pinon pine, 12 ins. diam., bears S. 20° E., 165 lks. dist., marked $\frac{1}{4}$ S. 24, B. T.
- A pinon pine, 6 ins. diam., bears S. 50° W., 150 lks. dist., marked $\frac{1}{4}$ S. 23, B. T.
- 47.50 Top of ridge, 200 ft. above mesa, bears N. E. and S. W.
- Descend.
- 65.00 Bottom of hollow, 150 ft. below ridge, course S. 30° W.
- Ascend .
- 80.00 Set a sandstone, 20x8x5 ins., 15 ins. in the ground, for cor. of secs. 13, 14, 23, and 24, marked with 3 notches on S. and 1 notch on E. edges; from which
- A pinon pine, 10 ins. diam., bears N. 37° E., 127 lks. dist., marked T. 11 S., R. 15 E., S. 13, B. T.
- A pinon pine, 6 ins. diam., bears S. 43° E., 195 lks. dist., marked T. 11 S., R. 15 E., S. 24, B. T.
- A pinon pine, 14 ins. diam., bears S. 31° W., 85 lks. dist., marked T. 11 S., R. 15 E., S. 23, B. T.
- A pinon pine, 10 ins. diam., bears N. 70° W., 9 lks. dist., marked T. 11 S., R. 15 E., S. 14, B. T.
- Land, mountainous and rolling mesa.
- Soil, sandy and clay; 3rd rate.
- A very little grass.
- Timber, scattering cedar and pinon pine.
- Undergrowth, sage brush and shadscales.
- Mountainous land, or land covered with dense undergrowth, 80.00 chs.

Subdivision of T.11 S., R.15 E. -Continued.

- Chains East, on a random line bet. secs. 13 and 24.
- 40.00 Set temp. $\frac{1}{2}$ sec. cor.
- 80.00 Intersect the E. bdy. of Tp., 16 lks. N., on the cor. of secs. 13, 18, 19, and 24, heretofore described.
- Thence I run
N. $89^{\circ}53'W.$, on a true line bet. secs. 13 and 24.
Over mountainous land; through scattering timber and scattering undergrowth.
- Ascend .
- 40.00 Set a sandstone, 15x14x5 ins., 10 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
- 53.00 Top of ridge, 600 ft. above sec. cor. and 100 ft. above $\frac{1}{2}$ sec. cor., bears N. $30^{\circ}E.$ and S. $30^{\circ}W.$
- Descend .
- 78.00 Bottom of hollow, 500 ft. below ridge, course S. $10^{\circ}E.$
- Ascend abruptly.
- 80.00 The cor. of secs. 13, 14, 23, and 24.
- Land, mountainous.
- Soil, gravelly; 3rd rate.
- Timber, cedar and pinon pine.
- Undergrowth, sage brush.
- A very little grass.
- Mountainous land, 80.00 chs.

September 6, 1902.

September 7, 1902, At 7 h 30 m a.m., l.m.t., I set off $39^{\circ}51'W.$, on the lat. arc; $6^{\circ}19'N.$, on the decl. arc; and determine a true meridian, with the solar, at the cor. of secs. 13, 14, 23, and 24.

Thence I run

N. $0^{\circ}01'W.$, bet. secs. 13 and 14.

Over mountainous land; through scattering timber and

Subdivision of T.11 S., R.15 E. -Continued.

Chains scattering undergrowth; ascend .

20.00 Top of ridge, 200 ft. above sec. cor., bears N. 65 ° E.
and S. 35° W.

Descend .

24.25 Bottom of hollow, 75 ft. below ridge, course W.

Ascend .

27.40 Top of ridge, 75 ft. above hollow, bears E. and W.

Descend .

30.00 Bottom of hollow, 75 ft. below ridge, course W.

Ascend .

40.00 Set a sandstone, 24x8x4 ins., 18 ins. in the ground, for
sec. cor., marked $\frac{1}{2}$ on W. face; and raise a mound of
stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impractic-
able.

41.00 Top of ridge, 200 ft. above hollow, bears E. and W.

Descend .

46.00 Bottom of hollow, 150 ft. below ridge, course W.

Ascend .

65.50 Top of ridge, 150 ft. above hollow, bears E. and W.

Descend .

77.50 Bottom of hollow, 200 ft. below ridge, course S. 30° W.

Ascend .

80.00 Set a sandstone, 18x8x6 ins., 12 ins. in the ground, for
cor. of secs. 11, 12, 13, and 14, marked with 4 notches on
S. and 1 notch on E. edges; from which

A pinon pine, 8 ins. diam., bears N. 36° E., 65
lks. dist., marked T.11 S., R.15 E., S.12, B.T.

A pinon pine, 10 ins. diam., bears S. 70° E., 76
lks. dist., marked T.11 S., R.15 E., S.13, B.T.

A pinon pine, 9 ins. diam., bears S. 38° W., 42
lks. dist., marked T.11 S., R.15 E., S.14, B.T.

A pinon pine, 12 ins. diam., bears N. 40° W., 17
lks. dist., marked T.11 S., R.15 E., S.11, B.T.

Land, mountainous.

Soil, sandy and clay and gravelly; 3rd rate.

Timber, cedar and pinon pine.

 Subdivision of T.11 S., R.15 E. -Continued.

Chains Underbrowth, sage brush.

A very little grass.

Mountainous land, 80.00 chs.

S. 89° 53' E., on a random line bet. secs. 12 and 13.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

80.02 Intersect E. bdy. of Tp., at the cor. of secs. 7, 12, 13,
and 18, heretofore described.

Thence I run

N. 89° 53' W., on a true line bet. secs. 12 and 13.

Over mountainous land; through scattering timber and
scattering undergrowth; ascend.

15.00 Top of ridge, 300 ft. above sec. cor., bears N. 60° W. and
S. 60° E.

Descend .

21.00 Bottom of hollow, 150 ft. below ridge, course S. E.

Ascend .

28.00 Top of ridge, 175 ft. above hollow, bears N. and S.

Descend .

35.75 Bottom of hollow, 150 ft. below ridge, course S. E.

Ascend.

40.01 Set a sandstone, 18x12x4 ins., 12 ins. in the ground, for
 $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; from which

A pinon pine, 7 ins. diam., bears N. 65° E., 65
lks. dist., marked $\frac{1}{2}$ S. 12, B. T.

A pinon pine, 12 ins. diam., bears S. 70° E., 45
lks. dist., marked $\frac{1}{2}$ S. 13, B. T.

47.00 Top of ridge, 200 ft. above hollow, bears N. W. and S. E.

Descend .

53.00 Bottom of hollow, 150 ft. below ridge, course S. W.

Ascend .

62.50 Top of ridge, 100 ft. above hollow, bears N. 70° E., and
S. 70° W.

Descend .

Subdivision of T.11 S., R.15 E. -Continued.

Chains

72.50 Bottom of hollow, 100 ft. below ridge, course S. 70° W.

Ascend .

80.02 The cor. of secs. 11, 12, 13, and 14.

Land, mountainous.

Soil, sandy and gravelly; 3rd rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

A very little grass.

Mountainous land, 80.02 chs.

N. 0° 01' W., bet. secs. 11 and 12.

Over mountainous land, through dense undergrowth and scattering timber.

Ascend .

1.50 Top of ridge, 20 ft. above sec. cor. bears E. and W.

Descend .

11.50 Bottom of hollow, 75 ft. below ridge, course S. W.

Ascend .

35.00 Top of divide ridge, between Nine Mile Canon and the DuChesne Valley, 150 ft. above hollow, bears E. and W.

Descend .

40.00 Set a sandstone, 24x12x8 ins., 18 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which

A pinon pine, 12 ins. diam., bears N. 80° E., 68 lks. dist., marked $\frac{1}{2}$ S. 12, B. T.

A pinon pine, 6 ins. diam., bears S. 80° W., 3 lks. dist., marked $\frac{1}{2}$ S., 11, B. T.

48.00 Bottom of hollow, 150 ft. below ridge, course N. 30° E.

Ascend .

78.50 Top of ridge, 100 ft. above hollow, bears N. 70° E. and S. 70° W.

Descend .

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Subdivision of T.11 S., R.15 E. -Continued.

Chains

- 80.00 Set a sandstone, 22x12x7 ins., 16 ins. in the ground, for cor. of secs. 1, 2, 11, and 12, marked with 5 notches on S. and 1 notch on E. edges; from which
- A pinon pine, 8 ins. diam., bears N. 58° E., 57 lks. dist., marked T.11 S., R.15 E., S.1, B.T.
 - A cedar, 8 ins. diam., bears S. 57° E., 10 lks. dist., marked T.11 S., R.15 E., S.12, B.T.
 - A pinon pine, 12 ins. diam., bears S. 15° W., 24 lks. dist., marked T.11 S., R.15 E., S.11, B.T.
 - A pinon pine, 12 ins. diam., bears N. 40° W., 28 lks. dist., marked T.11 S., R.15 E., S.2, B.T.

Land, mountainous.

Soil, sandy and gravelly; 3rd rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

A very little grass.

Mountainous land, 80.00 chs.

September 7, 1902: At this cor. I set off 6° 14' N., on the decl. arc; and at 0 h 2 m p.m., l.m.t., observe the sun on the meridian, the resulting lat. is 39° 53' N.

S. 89° 53' E., on a random line bet. secs. 1 and 12.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

79.88 Intersect E. bdy. Tp., 5 lks. S. of the cor. of secs. 1, 6, 7, and 12, heretofore described.

Thence I run

N. 89° 55' W., on a true line bet. secs. 1 and 12.

Over mountainous land; through scattering timber and scattering undergrowth.

Descend.

1.00 Bottom of hollow, 10 ft. below sec. cor., course N.E.

Ascend .

4.00 Enter heavy timber, bears N. and S.

7.00 Top of ridge, 75 ft. above hollow, bears N. and S.

 Subdivision of T.11 S., R.15 E. -Continued.

Chains

- Descend .
- 23.00 Leave timber, bears N. and S.
- 25.00 Bottom of hollow, 100 ft. below ridge, course N.E.
- Ascend .
- 35.00 Enter heavy timber, bears N. and S.
- 38.50 Top of ridge, 75 ft. above hollow, bears N. and S.
- Descend .
- 39.94 Set a limestone, 18x10x5 ins., 12 ins. in the ground, for
 $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; from which
- A pinon pine, 12 ins. diam., bears N. 2° W., 12
 lks. dist., marked $\frac{1}{2}$ S. 1, B.T.
- A cedar, 10 ins. diam., bears S. 7° W., 78 lks.
 dist., marked $\frac{1}{2}$ S. 12, B.T.
- 49.50 Leave timber, bears N. and S.
- 57.50 Enter heavy timber, bears N. and S.
- 62.00 Bottom of hollow, 75 ft. below ridge, course N.E.
- Ascend .
- 78.00 Top of ridge, 100 ft. above hollow, bears N. 70° E. and
 S. 70° W..
- Descend .
- 79.88 The cor. of secs. 1, 2, 11, and 12.
 land, mountainous.
 Soil, sandy and gravelly; 3rd rate.
 Timber, cedar and pinon pine.
 Undergrowth, sage brush.
 A very little grass.
 Mountainous or heavily timbered land, 79.88 chs.

N. 0° 01' W., on a true line bet. secs. 1 and 2.
 Over mountainous land; through heavy timber.
 Descend .

- 4.75 Bottom of hollow, 30 ft. below sec. cor., course N. 30° E.
 Ascend .

Subdivision of T.11 S., R.15 E.-Continued.

Chains

10.70 Top of ridge, 50 ft. above hollow, bears N. 40° E. and S. 40° W.

Descend .

18.90 Bottom of hollow, 50 ft. below ridge, course N. E.

Ascend .

22.00 Top of ridge, 40 ft. above hollow, bears N. E. and S. W.

Descend .

40.00 Set a sandstone, 18x10x4 ins., 12 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which

A cedar, 5 ins. diam., bears S. 86° E., 36 lks. dist., marked $\frac{1}{2}$ S. 1, B. T.

A pinon pine, 9 ins. diam., bears S. 88° W., 62 lks. dist., marked $\frac{1}{2}$ S. 2, B. T.

70.00 Leave heavy and enter scatterint timber, bears E. and W. Enter bottom of broad hollow, bears N. E. and S. W.

80.20 Intersect the Second Standard Parallel South, 10.90 chs. West of the standard cor. of secs. 35 and 36, heretofore described.

Set a sandstone, 18x9x8 ins., 12 ins. in the ground, for closing cor. of secs. 1 and 2, marked C. C. on S., with 1 groove on E. and 5 grooves on W. face; sand raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, S. of cor. Pits impracticable.

Land, mountainous.

Soil, sandy and gravelly; 3rd rate.

Timber, cedar and pinon pine.

A very little grass.

Mountainous or heavily timbered land, 80.20 chs.

September 7, 1902.

September 8, 1902: At 7 h 30 m a. m., l. m. t., I set off 39° 49' N., on the lat. arc; 5° 57' N., on the decl. arc;

Subdivision of T.11 S., R.15 E. -Continued.

Chains and determine a true meridian with the solar at the
cor. of secs. 2, 3, 34, and 35, heretofore described, on
S. bdy. of Tp.,

Thence I run

N. 0° 01' W., bet. secs. 34 and 35.

Over mountainous land; through scattering timber and
scattering undergrowth; ascend.

5.00 Top of ridge, 100 ft. above sec. cor., bears E. and W.

Descend .

20.00 Bottom of hollow, 200 ft. below ridge, course S. E.

Ascend .

40.00 Set a sandstone, 18x9x8 ins., 12 ins. in the ground, for
½ sec. cor., marked ½ on W. face; and raise a mound of
stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impractic-
able.

45.00 Top of ridge, 1000 ft. above hollow, bears N. 60° W. and
S. 60° E.

Descend .

60.00 Bottom of hollow, 300 ft. below ridge, course S. E.

Ascend .

76.00 Top of ridge, 200 ft. above hollow, bears E. and W.

Descend .

80.00 Set a limestone, 24x12x5 ins., 18 ins. in the ground, for
cor. of secs. 26, 27, 34, and 35, marked with 1 notch on
S. and 2 notches on E. edges; from which

A pinon pine, 8 ins. diam., bears N. 40° E., 118
lks. dist., marked T. 11 S., R. 15 E., S. 26, B. T.

A pinon pine, 7 ins. diam., bears S. 65° E., 45
lks. dist., marked T. 11 S., R. 15 E., S. 35, B. T.

A cedar, 10 ins. diam., bears S. 13° W., 80 lks.
dist., marked T. 11 S., R. 15 E., S. 34, B. T.

A pinon pine, 7 ins. diam., bears N. 30° W., 100
lks. dist., marked T. 11 S., R. 15 E., S. 27, B. T.

Land, mountainous.

Soil, sandy and gravelly loam; and locky; 2nd and 4th
rate.

 Subdivision of T.11 S., R.15 E. -Continued.

Chains Timber, cedar and pinon pine.

Undergrowth, sage brush.

A very little grass.

Mountainous land, 80.00 chs.

East, on a random line bet. secs. 26 and 35.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.96 Intersect N. and S. line, 10 lks. N. of the cor. of secs. 25, 26, 35, and 36.

Thence I run

N. $89^{\circ}56'$ W., on a true line bet. secs. 26 and 35.

Over rolling mesa through dense undergrowth.

3.00 Enter scattering timber, bears N. and S.

16.00 Leave mesa, bears N. and S.

Descend.

23.00 Bottom of canon, 400 ft. below mesa, course S.

Ascend abruptly.

39.96 Set a sandstone, 20x10x4 ins., 15 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

50.00 Top of ridge, 600 ft. above canon, bears N.W. and S.E.

Descend.

74.25 Bottom of canon, 500 ft. below ridge, course S.

Ascend.

79.96 The cor. of secs. 26, 27, 34, and 35.

Land, mountainous and rolling mesa.

Soil, sandy and gravelly; 3rd rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth, 79.96 chs.

Subdivision of T.11 S., R.15 E. -Continued.

Chains

N.0°01'W., bet. secs. 26 and 27.

Over mountainous land; through scattering timber and scattering undergrowth.

Descend .

2.50 Bottom of hollow, 70 ft. below sec. cor., course E.

Ascend .

5.00 Top of ridge, 100 ft. above hollow, bears E. and W.

Descend .

13.00 Bottom of hollow, 75 ft. below ridge, course E.

Ascend .

17.50 Top of ridge, 75 ft. above hollow, bears E. and W.

Descend .

22.00 Bottom of hollow, 50 ft. below ridge, course E.

Ascend .

26.00 Top of ridge, 60 ft. above hollow, bears E. and W.

Descend .

32.00 Bottom of hollow, 45 ft. below ridge, course S.W.

Ascend .

37.50 Top of ridge, 75 ft. above hollow, bears E. and W.

Descend .

40.00 Set a limestone, 18x10x6 ins., 12 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

42.50 Bottom of hollow, 50 ft. below ridge, course S. 20° W.

Ascend .

71.20 Top of ascent, 400 ft. above hollow, bears E. and W.

Thence over gently rolling mesa.

Enter dense sage brush and shadscales.

80.00 Set a sandstone, 30x12x4 ins., 22 ins. in the ground, for cor. of secs. 22, 23, 26, and 27, marked with 2 notches on S. and 2 notches on E. edges; from which

A pinon pine, 8 ins. diam., bears S. 46° W., 154 lks. dist., marked T.11 S., R.15 E., S. 27, B.T.

Subdivision of T.11 S., R.15 E.-Continued.

- Chains A pinon pine, 12 ins. diam., bears N. 10° W., 165
 lks. dist., marked T.11 S., R.15 E., S.22, B.T.
 No other trees within limits; raise a mound of stone,
 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
 Land, mountainous and rolling mesa.
 Soil, sandy and rocky; 3rd and 4th rate.
 Timber, cedar and pinon pine.
 Undergrowth, sage brush and shadscales.
 A very little grass.
 Mountainous land, or land covered with dense under-
 growth, 80.00 chs.
 September 8, 1902: At the noon hour the sky is over-
 cast and solar observations are impossible.
-
- S. 89° 56' E., on a random line bet. secs. 23 and 26.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 79.90 Intersect N. and S. line, 10 lks. N., of the cor. of secs.
 23, 24, 25, and 26.
 Thence I run
 N. 89° 52' W., on a true line bet. secs. 23 and 26.
 Over rolling mesa; through dense undergrowth.
- 30.00 Leave mesa, bears N. and S.
 Descend .
- 39.95 Set a limestone, 18x12x5 ins., 12 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of
 stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impractic-
 able.
- 45.00 Bottom of canon, 500 ft. below mesa, course S.
 Ascend .
- 66.00 Leave undergrowth and enter heavy timber, bears N. and
 S.
- 66.10 Top of ascent, 500 ft. above canon, bears N. and S.
 Thence over mesa.
- 74.50 Leave timber and enter dense undergrowth, bears N. and

Subdivision of T.11 S., R.15 E. -Continued.

Chains S.

- 79.90 The cor. of secs. 22, 23, 26, and 27.
 Land, mountainous and rolling mesa .
 Soil, sandy and gravelly; 3rd rate.
 Timber, cedar and pinon pine.
 Undergrowth, sage brush and shadscales.
 A very little grass.
 Mountainous or heavily timbered land, or land covered
 with dense undergrowth, 79.90 chs.
-
- N.0°01'W., bet. secs. 22 and 23.
 Over rolling mesa; through scattering timber and dense
 undergrowth.
- 18.00 Leave timber, bears E. and W.
- 40.00 Set a sandstone, 18x10x4 ins., 12 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; and raise a mound of
 stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impractic-
 able.
- 40.05 Top of sandstone ledge, 20 ft. high, bears N.10°E. and
 S.10°W.
 Descend from mesa.
- 46.00 Bottom of hollow, 100 ft. below mesa, course S.W.
 Ascend .
- 55.00 Top of ridge, 100 ft. above hollow, bears N.E. and S.W.
 Descend .
- 58.00 Enter heavy timber and leave undergrowth, bears E. and
 W.
- 62.50 Bottom of hollow, 100 ft. below ridge, course S.W.
 Ascend.
- 64.50 Old wagon road, bears E. and W.
- 79.50 Top of ridge, 300 ft. above hollow, bears N.W. and S.E.
 Descend .
- 80.00 Set a limestone, 20x6x4 ins., 15 ins. in the ground, for
 cor. of secs. 14, 15, 22, and 23, marked with 3 notches on

Subdivision of T.11 S., R.15 E. -Continued.

Chains 3 and 2 notches on E. edges; from which

A pinon pine, 5 ins. diam., bears N. 32° E., 65 lks. dist., marked T.11 S., R.15 E., S.14, B.T.

A pinon pine, 12 ins. diam., bears S. 50° E., 28 lks. dist., marked T.11 S., R.15 E., S.23, B.T.

A pinon pine, 12 ins. diam., bears S. 42° W., 150 lks. dist., marked T.11 S., R.15 E., S.22, B.T.

A pinon pine, 7 ins. diam., bears N. 42° W., 120 lks. dist., marked T.11 S., R.15 E., S.15, B.T.

Land, mountainous and rolling mesa.

Soil, sandy and gravelly; 3rd rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush and shadscales.

A very little grass.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

September 8, 1902.

September 9, 1902: At 7 h 30 m a.m., l.m.t., I set off 39° 51' N., on the lat. arc; 5° 34' N., on the decl. arc; and determine a true meridian with the solar, at the cor. of secs. 14, 15, 22, and 23.

Thence I run

S. 89° 52' E., on a random line bet. secs. 14 and 23.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

79.92 Intersect N. and S. line, 7 lks. S. of the cor. of secs. 13, 14, 23, and 24.

Thence I run

N. 89° 55' W., on a true line bet. secs. 14 and 23.

Over mountainous land; through scattering timber and scattering undergrowth.

Ascend .

9.50 Top of ridge, 200 ft. above sec. cor., bears N. 30° E. and S. 30° W.

Subdivision of T.11 S., R.15 E. -Continued.

Chains Descend .

39.96 Set a sandstone, 20x10x4 ins., 15 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

45.00 Bottom of hollow, 475 ft. below ridge, course S. 30° W.
Ascend gradually.

79.92 The cor. of secs. 14, 15, 22, and 23.

Land, mountainous.

Soil, sandy and gravelly; 3rd rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

A very little grass.

Mountainous land, 79.92 chs.

N. 0° 01' W., bet. sec. 14 and 15.

Over mountainous land; through scattering timber and scattering undergrowth; ascend .

14.00 Top of ridge, 300 ft. above sec. cor., bears N. 30° E. and S. 70° W.

Descend .

22.00 Bottom of hollow, 200 ft. below ridge, course W.

Ascend .

32.50 Top of ridge, 300 ft. above hollow, bears N. 20° E. and S. 20° W.

Descend .

40.00 Set a sandstone, 20x11x4 ins., 15 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which

A pinon pine, 10 ins. diam., bears N. 74° E., 135 lks. dist., marked $\frac{1}{2}$ S. 14, B.T.

A pinon pine, 4 ins. diam., bears S. 86° W., 45 lks. dist., marked $\frac{1}{2}$ S. 15, B.T.

42.00 Bottom of hollow, 30 ft. below $\frac{1}{2}$ sec. cor., course W.
Ascend .

Subdivision of T.11 S., R.15 E. -Continued.

Chains

- .73.00 Top of ridge, 100 ft. above hollow, bears N.E. and S.W.
Descend.
- 76.00 Hollow, 60 ft. below ridge, course S.W.
Ascend.
- 78.00 Top of ridge, 40 ft. above hollow, bears N.E. and S.W.
Descend.
- 80.00 Set a sandstone, 20x10x6 ins., 15 ins. in the ground,
for cor. of secs. 10, 11, 14, and 15, marked with 4 notches
on S. and 2 notches on E. edges; from which
- A pinon pine, 14 ins. diam., bears N. 70° E., 160
lks. dist., marked T.11 S., R.15 E., S.11, B.T.
 - A pinon pine, 12 ins. diam., bears S. 60° E., 180
lks. dist., marked T.11 S., R.15 E., S.14, B.T.
 - A pinon pine, 11 ins. diam., bears S. 71° W., 45
lks. dist., marked T.11 S., R.15 E., S.15, B.T.
 - A cedar, 13 ins. diam., bears N. 14° W., 33 lks.
dist., marked T.11 S., R.15 E., S.10, B.T.
- Land, mountainous.
Soil, clay and gravelly; 3rd rate.
Timber, cedar and pinon pine.
Undergrowth, sage brush.
Good grass for grazing.
Mountainous land, 80.00 chs.

S. 89° 55' E., on a random line bet. secs. 11 and 14.

- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.00 Intersect N. and S. line, 12 lks. S. of the cor. of secs.
11, 12, 13, and 14.
Thence I run
West, on a true line bet. secs. 11 and 14.
Over mountainous land; through heavy timber;
Descend gradually along side of ridge.

Subdivision of T.11 S., R.15 E. -Continued.

Chains

27.00 Bottom of hollow, 150 ft. below sec. cor., course S. 35° W.
Ascend .

34.00 Top of ridge, 75 ft. above hollow, bears N. 20° E. and S.
20° W. Leave heavy and enter scattering timber.
Descend.

40.00 Set a sandstone, 18x9x5 ins., 12 ins. in the ground, for
 $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; from which
A cedar, 5 ins. diam., bears N. 20° E., 125 lks.
dist., marked $\frac{1}{2}$ S. 11, R. T.

No other trees within limits; raise a mound of stone,
2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

40.10 Bottom of hollow, 100 ft. below ridge, course S. 30° W.
Ascend .

44.00 Enter heavy timber, bears N. and S.

53.00 Top of ridge, 100 ft. above hollow, bears N. and S. 50° W.
Ascend .

58.50 Bottom of hollow, 60 ft. below ridge, course S. 30° W.
Ascend .

67.50 Top of ridge, 60 ft. above hollow, bears N. 40° E. and
S. 40° W.
Descend .

76.25 Bottom of hollow, 100 ft. below ridge, course S. W.
Ascend .

78.00 Top of ridge, 50 ft. above hollow, bears N. E. and S. W.
Descend .

80.00 The cor. of secs. 10, 11, 14, and 15.
Land, mountainous.

Soil, sandy and gravelly; 3rd rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Mountainous or heavily timbered land, 80.00 chs.

A N. 0° 01' W., bet. secs. 10 and 11.

Subdivision of T.11 S., R.15 E. -Continued.

- Chains Over mountainous land; through heavy timber.
- Descend .
- 1.00 Bottom of hollow, course S.W.
- Ascend .
- 5.00 Top of spur, 50 ft. above hollow, bears N.E. and S.W.
- 8.00 Bottom of hollow, 30 ft. below spur, course S.30°W.
- Ascend .
- 20.00 Top of ridge, 60 ft. above hollow, bears N.15°E. and S.15°W.
- Descend .
- 29.00 Bottom of hollow, 30 ft. below ridge, course S.20°W.
- Ascend .
- 40.00 Set a sandstone, 18x11x4 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; from which
- A pinon pine, 11 ins. diam., bears S.89°E.,
148 lks. dist., marked $\frac{1}{4}$ S.11, B.T.
- A pinon pine, 7 ins. diam., bears N.84°W., 44
lks. dist., marked $\frac{1}{4}$ S.10, B.T.
- 55.00 Top of ridge, 100 ft. above hollow, bears N.60°W. and S.60°E. (This is divide between Nine Mile Canon and the DuChesne Valley . Descend.
- 60.00 Bottom of hollow, 50 ft. below ridge, course N.30°E.
- Ascend .
- 65.00 Top of ridge, 50 ft. above hollow, bears N.E. and S.W.
- Descend .
- 70.00 Leave timber, and enter dense undergrowth, bears N.E. and S.W.
- 72.00 Bottom of hollow, 40 ft. below ridge, course N.E.
- Ascend .
- 78.00 Enter heavy timber, bears E. and W.
- 80.00 Set a sandstone, 20x11x5 ins., 15 ins. in the ground, for cor. of secs. 2, 3, 10, and 11, marked with 5 notches on S. and 2 notches on E. edges; from which
- A cedar, 10 ins. diam., bears N.78°E., 65 lks.
dist., marked T.11 S., R.15 E., S.2, B.T.

Subdivision of T.11 S., R.15 E. -Continued.

Chains A cedar, 10 ins. diam., bears S. 38° E., 60 lks.
 dist., marked T.11 S., R.15 E., S.11, B.T.
 A cedar, 9 ins. diam., bears S. 75° W., 90 lks.
 dist., marked T.11 S., R.15 E., S.10, B.T.
 A pinon pine, 15 ins. diam., bears N. 54° W., 95
 lks. dist., marked T.11 S., R.15 E., S.3, B.T.

Land, mountainous .

Soil, sandy and clay; 3rd rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered
 with dense undergrowth, 80.00 chs.

September 9, 1902: At the noon hour the sky is over
 cast and solar observations are impossible.

East, on a random line bet. secs. 2 and 11.

40.00 Set temp. & sec. cor.

80.10 Intersect N. and S. line, 10 lks. N. of the cor. of secs.
 1, 2, 11, and 12.

Thence I run

N. 89° 56' W., on a true line bet. secs. 2 and 11.

Over mountainous land; through heavy timber.

Descend .

11.50 Bottom of hollow, 50 ft. below sec. cor., course N. 40° E.

Ascend .

16.50 Top of ridge, 50 ft. above hollow, bears N. 30° E. and S.
 30° W.

Descend .

20.00 Leave timber, bears N. 30° E. and S. 30° W.

22.00 Bottom of hollow, 50 ft. below ridge, course N. E.

Ascend .

24.00 Enter heavy timber, bears N. E. and S. W.

27.00 Top of ridge, 50 ft. above hollow, bears N. E. and S. W.

Subdivision of T.11 S., R.15 E. -Continued.

Chains	Descend .
35.00	Bottom of hollow, 40 ft. below ridge, course N.20° E. Ascend .
40.05	Top of ridge, 50 ft. above hollow, bears N.10° E. and S.10° W. Set a limestone, 14x10x6 ins., 9 ins. in the ground, for ½ sec. cor., marked \ddagger on N. face; from which A cedar, 11 ins. diam., bears N.23° W., 52 lks. dist., marked \ddagger S.2, B.T. A pinon pine, 9 ins. diam., bears S.26° E., 76 lks. dist., marked \ddagger S.11, B.T. Descend .
48.00	Bottom of hollow, 50 ft. below ridge, course N.10° E. Ascend .
55.00	Top of ridge, 75 ft. above hollow, bears N.15° E. and S.15° W. Descend .
65.00	Bottom of hollow, 75 ft. below ridge, course N.30° E. Ascend .
68.50	Top of ridge, 20 ft. above hollow, bears N.40° E. and S.40° W. Descend .
74.50	Bottom of hollow, 40 ft. below ridge, course N.E. Ascend .
80.10	The cor. of secs. 2, 3, 10, and 11. Land, mountainous. Soil, clay and sandy; 3rd rate. Timber, cedar and pinon pine. Undergrowth, sage brush. A very little grass. Mountainous or heavily timbered land, 80.10 chs.

N.0°01'W., on a true line bet. secs. 2 and 3.

Subdivision of T.11 S., R.15 E.-Continued.

- Chains Over mountainous land, through scattering timber.
Ascend .
- 5.00 Top of ridge, 40 ft. above sec. cor., bears N.30° E.
and S.30° W.
Descend .
- 13.50 Bottom of hollow, 50 ft. below ridge, course N.30° E.
Ascend .
- 32.00 Top of ridge, 50 ft. above hollow, bears N.25° E. and S.
25° W.
Descend .
- 40.00 Set a sandstone, 18x9x4 ins., 12 ins. in the ground, for
½ sec. cor., marked ½ on W. face; from which
A cedar, 9 ins. diam., bears N.47° E., 48 lks.
dist., marked ½ S.2, B.T.
A pinon pine, 10 ins. diam., bears N.76° W., 73
lks. dist., marked ½ S.3, B.T.
- 53.00 Leave timber, and enter dense sage brush, bears N.70° E.
and S.70° W.
- 63.00 Enter ~~bottom~~ hollow, 100 ft. below ridge, course N.30° E.
Descend through scattering timber.
- 80.28 Intersect the Second Standard Parallel South, 11.02
chs. West, of the Standard cor. of secs. 34 and 35,
heretofore described.
Set a sandstone, 18x9x8 ins., 12 ins. in the ground, for
closing cor. of secs. 2 and 3, marked C.C. on S., with
2 grooves on E. and 4 grooves on W. faces; and raise
a mound of stone, 2 ft. base, 1½ ft. high, S. of cor. Pits
impracticable.
Land, mountainous.
Soil, sandy and clay; 3rd rate.
Timber, cedar and pinon pine.
Undergrowth, sage brush.
A very little grass.
Mountainous land, or land covered with dense under-
growth, 80.28 chs.

Subdivision of T.11 S., R.15 E.-Continued.

Chains

September 9, 1902.

September 10, 1902: At 7 h 30 m a.m., l.m.t., I set off $39^{\circ}49'N.$, on the lat. arc; $5^{\circ}13'N.$, on the decl. arc; and determine a true meridian with the solar at the cor. of secs. 3, 4, 33, and 34, on S. bdy. of Tp., heretofore described.

Thence I run

$N.0^{\circ}02'W.$, bet. secs. 33 and 34.

Over mountainous land; through scattering undergrowth. Ascend abruptly over a series of ledges.

5.00 Enter scattering timber, bears N.E. and S.W.

35.00 Top of ridge, 500 ft. above sec. cor., bears N.E. and S.W. Descend abruptly over ledges.

40.00 Set a sandstone, 18x8x7 ins., 12 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

50.00 Bottom of hollow, 400 ft. below ridge, course W. Ascend over ledges.

64.00 Top of ridge, 300 ft. above hollow, bears E. and W. Descend .

73.00 Bottom of hollow, 100 ft. below ridge, course W. Ascend .

80.00 Set a sandstone, 20x14x4 ins., 15 ins. in the ground, for cor. of secs. 27, 28, 33, and 34, marked with 1 notch on S. and 3 notches on E. edges; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

This cor. is 60 ft. below ridge.

Land, mountainous.

Soil, gravelly and rocky; 3rd and 4th rate.

Timber, scattering cedar and pinon pine.

Undergrowth, sage brush.

Subdivision of T.11 S., R.15 E. -Continued.

Chains	Good grass for grazing. Mountainous land, 80.00 chs.
	East, on a random line bet. secs. 27 and 34.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.12	Intersect N. and S. line, 2 lks. N. of the cor. of secs. 26, 27, 34, and 35. Thence I run N. $89^{\circ}59'W.$, on a true line bet. secs. 27 and 34. Over mountainous land; through scattering timber. Ascend .
7.50	Top of ridge, 200 ft. above sec. cor., bears N.W. and S.E. Descend.
11.00	Bottom of hollow, 100 ft. below ridge, course S.E. Ascend .
34.00	Top of ascent, 250 ft. above hollow, bears N. and S. Enter dense sage brush, bears N. and S. Thence over level mesa.
40.06	Set a sandstone, 22x12x5 ins., 16 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from which A cedar, 7 ins. diam., bears N. $27^{\circ}E.$, 62 lks. dist., marked $\frac{1}{4}$ S. 27, B.T. A pinon pine, 4 ins. diam., bears S. $55^{\circ}E.$, 46 lks. dist., marked $\frac{1}{4}$ S. 34, B.T.
40.50	Leave mesa, bears N. and S. Descend abruptly over ledges.
42.50	Foot of descent, bears N. and S. 150 ft. below mesa. Leave ledges. Thence over level mesa.
64.50	Leave mesa, bears N. and S. Descend abruptly over a series of ledges.
80.12	The cor. of secs. 27, 28, 33, and 34.

Subdivision of T.11 S., R.15 E. -Continued.

- Chains Land, mountainous.
 Soil, sandy and rocky; 3rd and 4th rate.
 Timber, cedar and pinon pine.
 Undergrowth, sage brush.
 A very little grass.
 Mountainous land, or land covered with dense undergrowth, 80.12 chs.
-
- N.0°02'W., bet. secs. 27 and 28.
 Over mountainous land; through scattering timber and scattering undergrowth.
 Ascend over a series of ledges.
- 12.00 Top of ridge, 100 ft. above sec. cor., bears E. and W.
 Descend .
- 32.00 Bottom of Water Canon, 300 ft. below ridge, course S.70° W.
 Ascend .
- 35.00 Foot of perpendicular ledge, 150 ft. high, bears N.70° E. and S.70° W.
- 38.00 Top of ridge, 200 ft. above canon, bears E. and W.
 Descend .
- 40.00 Set a sandstone, 18x4x4 ins., 12 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which
 A pinon pine, 6 ins. diam., bears N.80° E., 110 lks. dist., marked $\frac{1}{2}$ S.27, S.T.
 No other trees within limits; raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
- 43.00 Bottom of hollow, 100 ft. below ridge, course E.
 Ascend .
- 45.25 Foot of perpendicular ledge, 35 ft. high, bears E. and W.
- 45.50 Top of ridge, 125 ft. above hollow, bears E. and W.
 Descend .
- 45.75 Top of perpendicular ledge, 50 ft. high, bears E. and W.

Subdivision of T.11 S., R.15 E.-Continued.

Chains

- 46.25 Bottom of hollow, 150 ft. below ridge, course E.
Ascend .
- 47.50 Foot of sandstone, ledge, 50 ft. high, bears E. and W.
- 48.00 Top of ridge, 100 ft. above hollow, bears E. and W.
Descend .
- 51.00 Bottom of hollow, 100 ft. below ridge, course E.
Ascend .
- 54.00 Top of ridge, 100 ft. above hollow, bears E. and W.
Descend .
- 64.50 Bottom of hollow, 300 ft. below ridge, course S. E.
Ascend. (This is Water Canon)
- 67.00 Bottom of same canon, course S. W.
Ascend .
- 72.00 Top of spur, 60 ft. above canon, bears E. and W.
Descend .
- 75.50 Bottom of same canon, , course S. 20° E.
Thence along bottom of canon.
- 77.00 Leave canon bottom, course S. .
Ascend . Leave ledges.
- 80.00 Top of ridge, 100 ft. above canon, bears E. and W.
Set a sandstone, 18x12x4 ins., 12 ins. in the ground, for
cor. of secs. 21, 22, 27, and 28, marked with 2 notches on
S. and 3 notches on E. edges; and raise a mound of stone,
2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
Land, mountainous.
Soil, gravelly and rocky; 3rd and 4th rate.
Timber, scattering cedar and pinon pine.
Undergrowth, sage brush.
A very little grass.
Mountainous land, 80.00 chs.
From the above described cor. a small alkaline spring
bears N. 17° E. about 23.00 chs.
A corral (claimant unknown) bears N. 16° E. about 23.00
chs. (Both in bottom of Water Canon)

Subdivision of T.11 S., R.15 E. -Continued.

Chains September 10, 1902: At this cor. I set off $5^{\circ}06'N.$, on the decl. arc; and at 0 h 2 m p.m., l.m.t., observe the sun on the meridian, the resulting lat. is $39^{\circ}50'N.$,

S. $89^{\circ}59'E.$, on a random line bet. secs. 22 and 27.
40.00 Set temp. $\frac{1}{2}$ sec. cor.

80.10 Intersect N. and S. line, at the cor. of secs. 22, 23, 26, and 27.

Thence I run

N. $89^{\circ}59'W.$ on a true line bet. secs. 22 and 27.

Over level mesa; through scattering timber and dense undergrowth.

3.00 Top of perpendicular ledge, 35 ft. high, bears N. and S.
Leave mesa, bears N. and S.

Descend abruptly.

30.00 Leave timber, bears N. and S.

33.80 Bottom of canon, 600 ft. below mesa, course S.W.

Ascend .

38.20 Foot of perpendicular ledge, 30 ft. high, bears N. and S.

40.05 Set a sandstone, 24x9x8 ins., 18 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

45.50 Top of ridge, 300 ft. above canon, bears N. and S.

Descend .

48.50 Top of perpendicular ledge, 30 ft. high, bears N. and S.

52.50 Bottom of canon, 400 ft. below ridge, course S. $25^{\circ}W.$

Ascend .

65.00 Top of ridge, 350 ft. above canon, bears N. $25^{\circ}E.$ and S. $25^{\circ}W.$

Descend .

69.50 Top of perpendicular ledge, 50 ft. high, bears N. and S.

78.50 Bottom of Water Canon, 400 ft. below ridge, course S.

Ascend ridge.

Subdivision of T.11 S., R.15 E. -Continued.

Chains

80.10 The cor. of secs. 21, 22, 27, and 28.
 Land, mountainous and level mesa.
 Soil, sandy and gravelly; 3rd rate.
 Timber, cedar and pinon pine.
 Undergrowth, sage brush.
 A very little grass.
 Mountainous land, or land covered with dense undergrowth,
 80.10 chs.

N. 0° 02' W., bet. secs. 21 and 22.

Over mountainous land; through scattering timber and
 scattering undergrowth.

Descend .

5.00 Bottom of hollow, 200 ft. below sec. cor., course S. E.

Ascend .

20.00 Top of ridge, 150 ft. above hollow, bears E. and W.

Descend .

30.00 Bottom of hollow, 150 ft. below ridge, course E.

Ascend .

40.00 Set a limestone, 22x9x4 ins., 18 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; and raise a mound of
 stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impractic-
 able.

49.60 Top of ridge, 150 ft. above hollow, bears E. and W.

Descend through heavy timber.

80.00 Leave timber, bears E. and W.

85.00 Bottom of canon, 100 ft. below ridge, course S. E.

Ascend .

80.00 Set a sandstone, 18x7x4 ins., 12 ins. in the ground, for
 cor. of secs. 15, 16, 21, and 22, marked 11S. on N. E., and
 15 E. on S. E. faces; with 3 notches on S. and E. edges;
 and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of

Subdivision of T.11 S., R.15 E. -Continued.

Chains cor. Pits impracticable.

Land, mountainous.

Soil, gravelly and rocky; 3rd and 4th rate,

Timber, cedar and pinon pine.

Undergrowth, sage brush.

A very little grass.

Mountainous or heavily timbered land, 80.00 chs.

September 10, 1902: At this cor. I set off $39^{\circ}51'N.$, on the lat. arc; $5^{\circ}03'N.$, on the decl. arc; and at 4 h 3 m p.m., l.m.t., determine a true meridian, with the solar, and mark a point thereof on a stone, firmly set in the ground, 5.00 chs. N. of the cor.

At 2 h 07 m p.m., l.m.t., I observe Polaris at upper culmination, in accordance with the Manual, and mark a point in the true meridian thus determined by cutting a small groove in the stone already set, 5.00 chs. N. of the cor.; this mark falls 0.35 ins. east of the true meridian established by the solar.

September 10, 1902.

September 11, 1902: At 7 h 30 m a.m., l.m.t., I set off $39^{\circ}51'N.$, on the lat. arc; $4^{\circ}49'N.$, on the decl. arc; and determine a true meridian with the solar, and mark a point thereof by a cross on the stone already set, 5.00 chs. N. of the cor.; this mark falls 0.35 ins. east of the true meridian established by Polaris observation.

The solar apparatus, by p.m. and a.m. observations, defines positions for true meridians respectively about, $0'19''$ west and $0'18''$ East of the true meridian established by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

Subdivision of T.11 S., R.15 E.-Continued.

Chains

The magnetic bearing of the true meridian at 8 h
0 m a., m., l. m. t., is $16^{\circ} 18' W.$, the angle this de-
termined reduced by the table page 100 of the Manual
gives the mean mag. decl. $16^{\circ} 15' E.$

S. $89^{\circ} 59' E.$, on a random line bet. secs. 15 and
22.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

79.90 Intersect N. and S. line, at the cor. of secs. 14, 15, 22,
and 23.

Thence I run

N. $89^{\circ} 59' W.$, on a true line bet. secs. 15 and
22.

Over mountainous land; through scattering timber and
scattering undergrowth; ascend .

4.00 Top of ridge, 100 ft. above sec. cor., bears N. W. and
S. E.

Descend .

24.00 Foot of descent, 300 ft. below ridge, bears N. W. and
S. E.

Enter dense undergrowth, bears N. W. and S. E.

Thence Over rolling mesa.

25.00 Old road, bears N. W. and S. E.

39.95 Set a sandstone, 20x8x5 ins., 15 ins. in the ground, for
 $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; and raise a mound of
stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impractic-
able.

51.00 Leave mesa, bears N. and S.

Descend .

55.50 Bottom of Water Canon, 300 ft. below mesa, course S.
Ascend .

68.50 Top of ridge, 300 ft. above canon, bears N. and S.

Subdivision of T.11 S., R.15 E. -Continued.

Chains Descend .

79.90 The cor.of secs.15,16,21,and 22.
 Land,mountainous and rolling mesa.
 Soil,sandy and gravelly;3rd rate.
 Timber,cedar and pinon pine.
 Undergrowth,sage brush and shadscales.
 A very little grass .
 Mountainous land,or land covered with dense under-
 growth,79.90 chs.

N.0°02'W.,bet.secs.15 and 16.
 Over mountainous land;through scattering timber
 and scattering undergrowth;descend .

18.50 Bottom of canon,100 ft.below sec.cor.,course S.W.
 Ascend .

32.00 Old road,bears E.and W.

40.00 Top of ridge,300 ft.above canon,bears E.and W.
 Set a sandstone,20 x10x8 ins.,15 ins.in the ground,
 for $\frac{1}{2}$ sec.cor.,marked $\frac{1}{2}$ on W.face;from which
 A pinon pine,6 ins.diam.,bears N.32°E.,108
 lks.dist.,marked $\frac{1}{2}$ S.15,B.T.
 No other trees within limits;raise a mound of stone,
 2 ft.base,1 $\frac{1}{2}$ ft.high,W.of cor.Pits impracticable.
 Descend .

48.50 Bottom of hollow,150 ft.below ridge,course E.
 Ascend .

59.00 Top of ridge,100 ft.above hollow,bears E.and W.
 Descend .

80.00 Set a sandstone,24x12x5 ins.,18 ins. in the ground,
 for cor.of secs.9,10,15,and 16,marked with 4 notches
 on S.and 3 notches on E.edges;from which
 A pinon pine,9 ins.diam.,bears N.42°E.,42
 lks.dist.,marked T.11 S.,R.15 E.,S.10,B.T.

Subdivision of T.11 S., R.15 E. -Continued.

Chains A pinon pine, 5 ins. diam., bears N. 54° W., 92
 lks. dist., marked T.11 S., R.15 E., S. 9, B.T.
 No other trees within limits; raise a mound of
 stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impractic-
 able.
 Land, mountainous.
 Soil, sandy and gravelly; 3rd rate.
 Timber, cedar and pinon pine.
 Undergrowth, sage brush.
 A. very little grass.
 Mountainous land, 80.00 chs.

 S. 89° 59' E., on a random line bet. secs. 10 and 15.
 40.00 Set temp. ¼ sec. cor.
 79.98 Intersect N. and S. line, 10 lks. S. of the cor. of secs.
 10, 11, 14, and 15.
 Thence I run
 S. 89° 57' W., on a true line bet. secs. 10 and 15.
 Over mountainous land; through heavy timber.
 Descend .
 1.00 Bottom of hollow, 10 ft. below sec. cor., course S. W.
 Ascend .
 5.00 Top of ridge, 100 ft. above hollow, bears N. E. and S.
 30° W.
 Descend .
 10.00 Bottom of hollow , 125 ft. below ridge, course S. W.
 Ascend .
 15.00 Top of ridge, 100 ft. above hollow, bears S. 20° W. and
 N. 20° E.
 Descend .
 25.00 Bottom of hollow , 160 ft. below ridge, course S. 20° W.
 Ascend .
 38.00 Top of ridge, 250 ft. above hollow, bears N. and S.

Subdivision of T.11 S., R.15 E. -Continued.

- Chains Descend .
- 39.99 Set a sandstone, 18x8x5 ins., 12 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; from which
- A pinon pine, 10 ins. diam., bears N. 20° E.,
55 lks. dist., marked $\frac{1}{2}$ S. 10, B.T.
- A pinon pine, 5 ins. diam., bears S. 60° W., 110
lks. dist., marked $\frac{1}{2}$ S. 15, B.T.
- 52.00 Bottom of hollow, 300 ft. below ridge, course S.
Ascend .
- 60.00 Top of ridge, 300 ft. above hollow, bears N.W. and S.E.
Descend .
- 63.00 Bottom of hollow, 100 ft. below ridge, course S.E.
Ascend .
- 67.00 Top of ridge, 100 ft. above hollow, bears N. and S.
- 79.20 Bottom of Water Canon, 150 ft. below ridge, course
S.E.
Ascend .
- 79.98 The cor. of secs. 9, 10, 15, and 16.
Land, mountainous.
Soil, sandy and gravelly; 3rd rate.
Timber, cedar and pinon pine.
Undergrowth, sage brush.
A very little grass .
Mountainous or heavily timbered land, 79.98 chs.
September 11, 1902: At the noon hour the sky is over-
cast and solar observations are impossible.
-
- N. 0° 02' W., bet. secs. 9 and 10.
Over mountainous land; through heavy timber.
Descend .
- 2.00 Bottom of Water Canon, 10 ft. below sec. cor., course
S.E.
Ascend .

Subdivision of T.11 S., R.15 E.-Continued.

Chains

- 10.00 Top of ridge, 150 ft. above canon, bears E. and W.
Descend .
- 12.50 Bottom of hollow, 125 ft. below ridge, course S.E.
Ascend .
- 18.00 Top of ridge, 150 ft. above hollow, bears N.E. and S.W.
Descend .
- 21.50 Bottom of hollow, 150 ft. below ridge, course S.W.
(same hollow as crossed at 12.50 chs.)
Ascend .
- 28.50 Top of ridge, 200 ft. above hollow, bears E. and W.
Descend .
- 40.00 Set a sandstone, 18x14x4 ins., 12 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; from which
 A cedar, 8 ins. diam., bears N. 50° E., 115 lks.
 dist., marked $\frac{1}{4}$ S. 10, B.T.
 A pinion pine, 10 ins. diam., bears N. 70° W., 75
 lks. dist., marked $\frac{1}{4}$ S. 9, B.T.
 This cor. is 50 ft. below top of ridge.
- 45.50 Bottom of hollow, 50 ft. below $\frac{1}{4}$ sec. cor., course S.E.
Ascend .
- 73.50 Top of ridge, 150 ft. above hollow, bears N.W. and S.E.
Descend .
- 80.00 Set a sandstone, 22x12x4 ins., 16 ins. in the ground, for
 cor. of secs. 3, 4, 9, and 10, marked with 5 notches on S.
 and 3 notches on E. edges; from which
 A pinon pine, 7 ins. diam., bears N. 79° E., 67
 lks. dist., marked T. 11 S., R. 15 E., S. 3, B.T.
 A pinon pine, 9 ins. diam., bears S. 43° E., 73
 lks. dist., marked T. 11 S., R. 15 E., S. 10, B.T.
 A pinon pine, 5 ins. diam., bears S. 31° W., 50
 lks. dist., marked T. 11 S., R. 15 E., S. 9, B.T.
 A pinon pine, 10 ins. diam., bears N. 35° W., 100
 lks. dist., marked T. 11 S., R. 15 E., S. 4, B.T.

Subdivision of T.11 S., R.15 E. -Continued.

Chains Land, mountainous.

Soil, sandy and white clay; 3rd rate.

Timber, cedar and pinon pine.

A very little grass.

Mountainous or heavily timbered land, 80.00 chs.

N. 89° 57' E., on a random line bet. secs. 3 and 10.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

80.06 Intersect N. and S. line, 23 lks. N. of the cor. of secs.
2, 3, 10, and 11.

Thence I run

N. 89° 53' W., on a true line bet. secs. 3 and 10.

Over mountainous land, through heavy timber; ascend.

7.00 Top of ridge, 50 ft. above sec. cor., bears N.E. and S.W.

Descend .

13.50 Bottom of hollow, 75 ft. below ridge, course N.E.

Ascend .

18.00 Top of ridge, 100 ft. above hollow, bears N. and S.

Descend .

24.50 Bottom of hollow, 75 ft. below ridge, course N.

Ascend .

31.00 Top of ridge, 100 ft. above hollow, bears N. and S.

Descend .

37.50 Bottom of hollow, 50 ft. below ridge, course N.

Ascend .

40.03 Set a sandstone, 16x12x4 ins., 11 ins. in the ground, for
 $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; from which

A cedar, 10 ins. diam., bears N. 65° E., 55 lks.
dist., marked $\frac{1}{2}$ S. 3, B. T.

A pinon pine, 8 ins. diam., bears S. 20° E., 107
lks. dist., marked $\frac{1}{2}$ S. 10, B. T.

40.10 Top of divide ridge between Nine Mile Canon and the
DuChesne Valley, 100 ft. above hollow, bears N. and S.

Subdivision of T.11 S., R.15 E. -Continued.

- Chains Descend .
- 50.00 Bottom of hollow, 150 ft. below ridge, course S.E.
Ascend .
- 60.00 Top of ridge, 100 ft. above hollow, bears N. and S.
Descend .
- 71.40 Bottom of hollow, 100 ft. below ridge, course S.E.
Ascend .
- 80.06 The cor. of secs. 3, 4, 9, and 10.
Land, mountainous.
Soil, sandy and white clay; 3rd rate.
Timber, cedar and pinon pine.
A very little grass .
Mountainous or heavily timbered land; 80 .06 chs.
-
- N. 0° 02' W., on a true line bet. secs. 3 and 4.
Over mountainous land; through heavy timber:
Ascend .
- 12.50 Top of divide ridge between Nine Mile Canon and the
Du Chesne Valley, 150 ft. above sec. cor., bears E. and
W.
Descend .
- 21.00 Bottom of hollow, 100 ft. below ridge, course E.
Ascend .
- 25.00 Top of ridge, 75 ft. above hollow, bears E. and W.
Descend .
- 40.00 Set a sandstone, 18x9x8 ins., 12 ins. in the ground, for
¼ sec. cor., marked ¼ on W. face; from which
A pinon pine, 12 ins. diam., bears S. 87° E., 53
lks. dist., marked ¼ S. 3, B. T.
A pinon pine, 9 ins. diam., bears S. 60 ° W., 87
lks. dist., marked ¼ S. 4, B. T.
- 41.00 Leave timber and dense sage brush, bears N.E. and S.W.

Subdivision of T.11 S., R.15 E.-Continued.

Chains

45.50 Bottom of hollow, 150 ft. below ridge, course N.E.

Ascend .

50.00 Enter heavy timber, bears N.E. and S.W.

58.50 Top of ridge, 150 ft. above hollow, bears N.E. and S.W.

Descend .

61.00 Bottom of hollow, 150 ft. below ridge, course N. 80° E.

Ascend .

73.00 Top of ridge, 100 ft. above hollow, bears N.E. and S.W.

Descend .

80.32 Intersect the Second Standard Parallel South, 11.00 chs. West, of the re-established standard cor. of secs. 33 and 34, heretofore described.

Set a sandstone, 18x9x6 ins., 12 ins. in the ground, for closing cor. of secs. 3 and 4, marked with C.C. on S., with 3 grooves on E. and 3 grooves on W. faces; from which

A pinon pine, 9 ins. diam., bears S. 50° E., 34 lks. dist., marked T.11 S., R.15 E., S.3, B.T.

A cedar, 9 ins. diam., bears S. 10° W., 70 lks. dist., marked T.11 S., R.15 E., S.4, B.T.

Land, mountainous.

Soil, sandy and white clay; 3rd rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

A very little grass.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.32 chs.

September 11, 1902.

September 12, 1902: At 8 h 0 m a.m., l.m.t., I set off 39° 49' N., on the lat. arc; 4° 25' N., on the decl. arc; and

Subdivision of T.11 S., R.15 E. -Continued.

Chains determine a true meridian, with the solar, at the cor. of secs. 4, 5, 32, and 33, on S. bdy. of Tp., heretofore described.

Thence I run

N. 0° 03' W., bet. secs. 32 and 33.

Over mountainous land; through scatterint timber and scattering undergrowth;

Descend abruptly.

14.00 Foot of descent, 300 ft. below sec. cor., bears E. and W. Leave timber enter dense undergrowth, bears E. and W. Enter bottom of Nine Mile Canon.

14.40 Nine Mile Creek, 12 lks. wide, 3 ins. deep, moderate current, rocky bottom, course E.

15.50 Leave undergrowth and enter cultivated field, owned by *Pete* Francis, bears E. and W.

22.15 Leave cultivated land and enter dense undergrowth, bears E. and W.

22.25 Water ditch, 4 lks. wide, course S. 70° E.

23.00 Fence, bears N. 70° W. and S. 70° E.

25.40 Road in canon, bears N. 70° W. and S. 70° E.

26.40 Wash from Gate Canon, 50 lks. wide, 10 ft. deep, course S. 20° E.

26.93 Foot of perpendicular ledge, 20 ft. high, bears E. and W.

Note: From this point the line runs over a series of perpendicular ledges from 20 ft. to 200 ft. high, which it will be impossible to chain over, therefore at this point I

Set a sandstone, 18x12x5 ins., 12 ins. in the ground, for witness cor. to $\frac{1}{4}$ sec. cor., marked W. C. on N. and $\frac{1}{4}$ on W. faces; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ high, W. of cor. Pits impracticable.

To determine the distance to the top of the mountain I set a flag on line on top of maountain and measure a base west 10.00 chs. from which point the flag on

Subdivision of T.11 S., R.15 E. -Continued.

Chains top of ridge bears N.16°23'E., I compute the distance as follows:

Log.tan.73°37'=10.531653

log 10 =10.000000
.531653 =34.01, or

26.93 + 34.01 makes

60.94 Top of ridge, 1000 ft. above canon, bears E. and W.
Set a sandstone, 18x9x8 ins., 12 ins. in the ground, for witness point, marked W.P. on S. faces; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.

Descend abruptly over ledges.

73.75 Foot of descent, 800 ft. below ridge, bears N.40°E. and S.40°W.

Enter Gate Canon.

74.00 Bottom of Gate Canon, course S.40°W.

74.25 Price-Vernal road, bears N.40°E. and S.40°W.

75.00 Price-Fort Du Chesne telephone line, bears N.40°E. and S.40°W.

Leave canon bottom, bears N.40°E. and S.40°W.

Ascend.

80.00 Set a sandstone, 24x6x3 ins., 18 ins. in the ground, for cor. of secs. 28, 29, 32, and 33, marked with 1 notch on S. and 4 notches on E. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.

75.35
6.65

Land, mountainous and level canon bottom.

Soil, sandy loam and rocky; 2nd and 4th rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush and greasewood.

A very little grass.

Mountainous land, or land covered with dense undergrowth, 75.35 chs.

Subdivision of T.11 S., R.15 E. -Continued.

Chains

East, on a random line bet. secs. 28 and 33.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.04 Intersect N. and S. line, 7 lks. N. of the cor. of secs.
27, 28, 33, and 34.

Thence I run

N. $89^{\circ}57'W.$, on a true line bet. secs. 28 and 33.

Over mountainous land; through scattering timber.

Descend abruptly.

10.00 Bottom of Water Canon, 300 ft. below sec. cor., course
S.

Ascend .

15.00 Foot of perpendicular cliff, 150 ft. high, bears N.E.
and S.W. Thence over a series of ledges.

40.02 Set a limestone, 18x14x5 ins., 12 ins. in the ground,
for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; from which

A cedar, 12 ins. diam., bears N. $60^{\circ}W.$, 35 lks.
dist., marked $\frac{1}{2}$ S. 28, B.T.

A pinon pine, 5 ins. diam., bears S. $20^{\circ}W.$, 150
lks. di st., marked $\frac{1}{2}$ S. 33, B.T.

45.00 Top of divide ridge between Gate Canon and Water
Canon, 600 ft. above canon, bears N. and S. $20^{\circ}E.$

Descend abruptly over ledges.

57.00 Bottom of hollow, 600 ft. below ridge, course S.W.

Ascend .

66.00 Top of spur, 100 ft. above hollow, bears N. and S.

Descend .

75.00 Foot of descent, 200 ft. below ridge, bears N. $30^{\circ}E.$
and S. $30^{\circ}W.$

Enter bottom of Gate Canon.

75.50 Price-Vernal road, bears N. $30^{\circ}E.$ and S. $30^{\circ}W.$

76.00 Price - Fort Du Chesne Telephone line, bears N. $30^{\circ}E.$
and S. $30^{\circ}W.$

76.25 Leave canon bottom, bears N. $30^{\circ}E.$ and S. $30^{\circ}W.$

Ascend .

Subdivision of T.11 S., R.15 E. -Continued.

Chains

- 80.04 The cor. of secs. 28, 29, 32, and 33.
 Land, mountainous.
 Soil, sandy and rocky; 3rd and 4th rate.
 Timber, cedar and pinon pine.
 Undergrowth, sage brush.
 A very little grass.
 Mountainous land, 80.04 chs.
-
- N. 0° 03' W., bet. secs. 28 and 29.
 Over mountainous land; through scattering timber and
 scattering undergrowth.
 Ascend .
- 15.00 Top of ridge, 250 ft. above sec. cor., bears E. and W.
 Descend .
- 23.00 Bottom of hollow, 150 ft. below ridge, course S. 65° E.
 Ascend .
- 28.00 Top of ridge, 175 ft. above hollow, bears E. and W.
 Descend .
- 39.00 Bottom of hollow, 100 ft. below ridge, course E.
 ascend .
- 40.00 Set a limestone, 24x12x4 ins., 18 ins. in the ground, for
 $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which
 A pinon pine, 10 ins. diam., bears S. 70° E., 48
 lks. dist., marked $\frac{1}{2}$ S. 28, B.T.
 A cedar, 11 ins. diam., bears West 40 lks.
 dist., marked $\frac{1}{2}$ S. 29, B.T.
- 45.00 Top of ridge, 175 ft. above hollow, bears E. and W.
 Descend .
- 55.25 Foot of descent, 250 ft. below ridge, bears N. 30° W. and
 N. 80° E.
 Enter bottom of Gate Canon.
- 55.50 Price-Vernal road, bears N. 30° W. and N. 80° E.

Subdivision of T.11 S., R.15 E.-Continued.

Chains

- 55.60 Price-Fort Du Chesne telephone line, bears N.30°W. and N.80°E.
- 55.75 Wash, 15 lks. wide, 10 ft. deep, in Gate Canon, course N.80°E.
- 56.00 Leave canon bottom, bears N.30°W. and N.80°E.
Ascend .
- 80.00 Set a limestone, 36x12x5 ins., 27 ins. in the ground, for cor. of secs. 20, 21, 28, and 29, marked with 2 notches on S. and 4 notches on E. edges; from which
- A pinon pine, 14 ins. diam., bears N.60°E., 7 lks. dist., marked T.11 S., R.15 E., S.21, B.T.
 - A pinon pine, 6 ins. diam., bears S.70°E., 10 lks. dist., marked T.11 S., R.15 E., S.28, B.T.
 - A pinon pine, 14 ins. diam., bears S.10°W., 40 lks. dist., marked T.11 S., R.15 E., S.29, B.T.
 - A pinon pine, 14 ins., diam., bears N.70°W., 45 lks. dist., marked T.11 S., R.15 E., S.20, B.T.

Land, mountainous.

Soil, sandy and rocky; 3rd and 4th rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

A very little grass.

Mountainous land, 80.00 chs.

September 12, 1902: At this cor. I set off 4°20' N., on the decl. arc; and at 0 h 2 m p.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 39°50' N.

S.89°57'E., on a random line bet. secs. 21 and 28.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

80.06 Intersect N. and S. line, 7 lks. S. of the cor. of secs. 21, 22, 27, and 28.

Subdivision of T.11 S., R.15 E. -Continued.

Chains Thence 1 run
 West, on a true line bet. secs. 21 and 28.
 Over mountainous land; through scattering timber
 and scattering undergrowth.
 Ascend .
 12.00 Top of ridge, 200 ft. above sec. cor., bears N. and S.
 Descend .
 35.00 Bottom of hollow, 200 ft. below ridge course S. 30° E.
 Ascend .
 40.03 Set a sandstone, 18x9x6 ins., 12 ins. in the ground, for
 1/2 sec. cor., marked 1/2 on N. face; and raise a mound of
 stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impractic-
 able.
 50.00 Top of ridge, 300 ft. above hollow, bears N. and S.,
 This is divide ridge between Water and Gate Canons.
 Descend .
 65.00 Bottom of hollow, 400 ft. below ridge, course S. 20° W.
 Ascend .
 77.50 Foot of perpendicular ledge, 100 ft. high, bears N. and
 S.
 Enter heavy timber, bears N. and S.
 Begin more gradual ascent.
 80.06 The cor. of secs. 20, 21, 28, and 29.
 Land, mountainous .
 Soil, sandy and gravelly; 3rd rate.
 Timber, cedar and pinon pine.
 Undergrowth, sage brush.
 A very little grass .
 Mountainous or heavily timbered land, 80.06 chs.

N. 0° 05' W., bet. secs. 20 and 21.
 Over mountainous land; through heavy timber, and
 scattering undergrowth.

Subdivision of T.11 S., R.15 E. -Continued.

Chains	Ascend gradually.
15.00	Leave timber, and enter dense undergrowth, bears E, and W.
16.50	Top of ridge, 100 ft. above sec. cor., bears N. 50° E. and S. 50° W. Descend .
35.00	Enter scattering timber, bears E. and W.
40.00	Set a limestone, 18x8x4 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; from which A cedar, 10 ins. diam., bears N. 12° E., 150 lks. dist., marked $\frac{1}{4}$ S. 21, B.T. A pinon pine .7 ins. diam., bears S. 56° W., 58 lks. dist., marked $\frac{1}{4}$ S. 20, B.T.
56.75	Bottom of hollow, 150 ft. below ridge. course W. Ascend .
59.50	Top of ridge 100 ft. above hollow, bears E. and W. Descend.
67.00	Bottom of hollow, course S. E. Ascend.
72.20	Top of ridge, bears N. E. and S. W. Descend.
80.00	Set a limestone, 20x8x4 ins., 15 ins. in the ground, for cor. of secs. 16 , 17 , 20 , and 21 , marked with 3 notches on S. and 4 notches on E. edges; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Land, mountainous. Soil, sandy and gravelly; 3rd rate. Timber, cedar and pinon pine. Undergrowth, sage brush. Good grass for grazing. Mountainous land, or land covered with dense undergrowth, 80.00 chs.
	East, on a random line bet. secs. 16 and 21.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.84	Intersect N. and S. line, 2 lks. N. of the cor. of secs.

Subdivision of T.11 S., R.15 E. -Continued.

Chains 15, 16, 21, and 22.

Thence I run
 N. 89° 59' W., on a true line bet. secs. 16 and 21.
 Over mountainous land; through dense undergrowth.
 Descend .

4.25 Bottom of hollow, 200 ft. below sec. cor., course S.
 Ascend .

8.00 Top of ascent, 250 ft. above hollow, bears N. and S.
 Enter heavy timber, bears N. and S.
 Thence over rolling mesa.

15.00 Leave timber and enter dense undergrowth, bears N. and
 S.

33.00 Leave heavy timber and enter scattering timber and
 dense undergrowth, bears N. and S.

39.80 Leave mesa, bears N. W. and S. E.
 Descend .

39.92 Set a sandstone, 20x10x4 ins., 15 ins. in the ground,
 for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from which
 A pinon pine, 14 ins. diam., bears N. 20° W., 64
 lks. dist., marked $\frac{1}{4}$ S. 16, B. T.
 A pinon pine, 10 ins. diam., bears S. 23° W., 48
 lks. dist., marked $\frac{1}{4}$ S. 21, B. T.

44.50 Bottom of hollow, 150 ft. below mesa, course S.
 Ascend .

47.00 Top of ascent, 100 ft. above hollow, bears N. and S.
 Thence over level mesa.

51.70 Leave mesa, bears N. 20° E. and S. 20° W.
 Descend .

70.50 Bottom of hollow, 350 ft. below mesa, course S. W.
 Ascend .

74.00 Top of ridge, 100 ft. above hollow, bears N. and S.
 Descend .

79.84 The cor. of secs. 16, 17, 20, and 21.
 Land, mountainous and mesa.
 Soil, sandy and gravelly; 3rd rate.

Subdivision of T.11 S., R.16 E. -Continued.

Chains: Timber, cedar and pinon pine.
 Undergrowth, sage brush.
 A very little grass.
 Mountainous or heavily timbered land, or land covered
 with dense undergrowth, 79.84 chs.

September 12, 1902.

September 13, 1902: At 7 h 30 m a.m., l.m.t., I set
 off $39^{\circ} 51' N.$, on the lat. arc; $4^{\circ} 03' N.$, on the decl. arc;
 and determine a true meridian, with the solar, at the
 cor. of secs. 16, 17, 20, and 21.

Thence I run

$N. 0^{\circ} 03' W.$, bet. secs. 16 and 17.

Over mountainous land; through dense undergrowth.

Descend gently.

10.00 Bottom of hollow, 20 ft. below sec. cor., course $S. 10^{\circ}$
 $W.$

Ascend .

31.25 Top of ascent, 300 ft. above hollow, bears $N. 30^{\circ} E.$ and
 $S. 30^{\circ} W.$

Thence over level mesa.

40.00 Set a limestone, 24x10x5 ins., 18 ins. in the ground, for
 \bar{x} sec. cor., marked \bar{x} on W. face; and raise a mound of
 stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impractic-
 able.

47.40 Old road, bears $N. 80^{\circ} W.$ and $S. 80^{\circ} E.$

48.00 Leave mesa, bears $N. 80^{\circ} W.$ and $S. 80^{\circ} E.$

Enter scattering timber.

Ascend .

53.00 Top of ridge, 25 ft. above mesa, bears $E.$ and $W.$

Descend .

63.00 Bottom of hollow, 100 ft. below spur, course $W.$

Ascend .

Subdivision of T.11 S., R.15 E. -Continued.

Chains

80.00 Top of ridge, 100 ft. above hollow, bears E. and W. of.
Set a limestone, 24x8x5 ins., 18 ins. in the ground, for
cor. of secs. 8, 9, 16, and 17, marked with 4 notches on
S. and 4 notches on E. edges; from which

A pinon pine, 12 ins. diam., bears N. 45° E., 2
lks. dist., marked T.11 S., R.15 E., S. 9, B.T.

A pinon pine, 24 ins. diam., bears S. 37° E., 150
lks. dist., marked T.11 S., R.15 E., S. 16, B.T.

A pinon pine, 8 ins. diam., bears S. 58° W., 50
lks. dist., marked T.11 S., R.15 E., S. 17, B.T.

A pinon pine, 12 ins. diam. bears N. 67° W., 60
lks. dist., marked T.11 S., R.15 E., S. 8, B.T.

Land, mountainous and level mesa.

Soil, sandy and gravelly and white clay; 3rd rate.

Timber, cedar and pinon pine.

Undergrowth, sage and rabbit brush and shadscales.

A very little grass.

Mountainous land, or land covered with dense under-
growth, 80.00 chs.

S. 89° 59' E., on a random line bet. secs. 9 and 16.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.02 Intersect N. and S. line, at the cor. of secs. 9, 10, 16, and
16.

Thence I run

N. 89° 59' W., on a true line bet. secs. 9 and 16.

Over mountainous land; through heavy timber.

Ascend .

20.00 Top of ridge, 200 ft. above sec. cor., bears N. and S.

Descend .

37.50 Bottom of hollow, 200 ft. below ridge, course S. 20° W.

Ascend .

Subdivision of T.11 S., R.15 E.-Continued.

- Chains Leave heavy and enter scattering timber.
- 40.01 Set a sandstone, 18x11x5 ins., 12 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
- 58.50 Top of ridge, 150 ft. above hollow, bears N.E. and S.W.
Descend along top of ridge, bears W.
- 80.02 The cor. of secs. 8, 9, 16, and 17.
Land, mountainous.
Soil, sandy and white clay; 3rd rate.
Timber, cedar and pinon pine.
Undergrowth, sage brush.
A very little grass.
Mountainous or heavily timbered land, 60.02 chs.
-
- N. 0° 03' W., bet. secs. 8 and 9.
Over mountainous land; through scattering timber and scattering undergrowth.
Descend.
- 18.50 Price-Fort Du Chesne telephone line, bears N.E. and S.W.
- 23.95 Price-Vernal road, bears N.E. and S.W.
- 25.50 Bottom of Gate Canon, 100 ft. below sec. cor., course S.W.
Ascend.
- 40.00 Set a sandstone, 18x14x4 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
- 60.00 Top of ridge, 500 ft. above canon, bears N.E. and S.W.
Descend.
- 75.50 Bottom of hollow, 200 ft. below ridge, course S.W.
Descend.

Subdivision of T.11 S., R.15 E. -Continued.

Chains

77.00 Top of ridge, 50 ft. above hollow, bears E. and W.

Descend .

79.40 Bottom of hollow, 60 ft. below ridge, course S. E.

Ascend .

80.00 Set a sandstone, 36x8x6 ins., 27 ins. in the ground; for cor. of secs. 4, 5, 8, and 9, marked with 5 notches on S. and 4 notches on E. edges; from which

A pinon pine, 14 ins. diam., bears N. 30° E., 60

lks. dist., marked T.11 S., R.15 E., S. 4, B.T.

A pinon pine, 12 ins. diam., bears S. 60° E., 54

lks. dist., marked T.11 S., R.15 E., S. 9, B.T.

A pinon pine, 13 ins. diam., bears S. 55° W., 100

lks. dist., marked T.11 S., R.15 E., S. 8, B.T.

A pinon pine, 6 ins. diam., bears N. 10° W., 65

lks. dist., marked T.11 S., R.15 E., S. 5, B.T.

Land, mountainous.

Soil, sandy and white clay; 3rd rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous land, 80.00 chs.

September 13, 1902: At the noon hour the sky is overcast and solar observations are impossible.

S. 89° 59' E., on a random line bet. secs. 4 and 9.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

80.06 Intersect N. and S. line, 5 lks. N. of the cor. of secs. 3, 4, 8, and 10.

Thence I run

N. 89° 57' W., on a true line bet. secs. 4 and 9.

Over mountainous land; through heavy timber.

Ascend .

Subdivision of T.11 S., R.15 E. -Continued.

Chains:

- 1.50 Top of ridge, 10 ft. above sec. cor., bears N. and S.
Descend .
- 5.50 Bottom of hollow, 10 ft. below ridge, course S.W.
Ascend .
- 9.00 Top of spur, 50 ft. above hollow, bears N.E. and S.W.
Descend .
- 14.50 Price-Fort Du Chesne telephone line, bears N. and S.
- 15.00 Price - Vernal road, bears N. and S.W.
- 15.75 Bottom of Gate Canon, 75 ft. below ridge, course S.W.
Ascend .
- 20.00 Top of ridge, 100 ft. above canon, bears N. and S.
Descend .
- 28.00 Bottom of hollow, 100 ft. below ridge, course S.
Ascend .
- 40.03 Top of ridge, 125 ft. above hollow, bears N. and S.
Set a sandstone, 18x7x4 ins., 12 ins. in the ground, for
sec. cor., marked \ddagger on N. face; from which
A pinon pine, 8 ins. diam., bears N. 3° W., 51
lks. dist., marked \ddagger S. 4, B.T.
A pinon pine, 10 ins. diam., bears S. 75° E., 45
lks. dist., marked \ddagger S. 9, B.T.
- 60.00 Bottom of hollow, 100 ft. below ridge, course S.
Ascend .
- 73.00 Top of ridge, 200 ft. above hollow, bears N. and S.
Descend .
- 80.06 The cor. of secs. 4, 5, 8, and 9.
Land, mountainous.
Soil, sandy and white clay; 3rd rate.
Timber, cedar and pinon pine.
Undergrowth, sage brush.
A very little grass.
Mountainous or heavily timbered land, 80.06 chs.

Subdivision of T.11 S., R.15 E. -Continued.

Chains

N.0°03'W., on a true line bet. secs. 4 and 5.

Over mountainous land; through heavy timber and scattering undergrowth.

Ascend .

12.50 Old road, bears Ea and W., on top of divide ridge between Nine Mile cañon and the Du Chesne Valley, 200 ft. above sec. cor., bears E. and W.

Descend .

40.00 Set a sandstone, 18x10x4 ins., 12 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which

A cedar, 10 ins. diam., bears S.70°E., 65 lks. dist., marked $\frac{1}{2}$ S.4, B.T.

A cedar, 8 ins. diam., bears S.82°W., 55 lks. dist., marked $\frac{1}{2}$ S.5, B.T.

45.50 Bottom of hollow, 300 ft. below ridge, course **S.W.**

Ascend .

50.00 Top of ridge, 100 ft. above hollow, bears N.E. and S.W.

Descend .

80.36 Bottom of hollow, 100 ft. below ridge, course N.E.

Intersect the Second Standard Parallel South, 11.12 chs. West, of the re-established standard cor. of secs. 32 and 33, heretofore described.

Set a sandstone, 18x10x6 ins., 12 ins. in the ground, for closing cor. of secs. 4 and 5., marked C.C. on S., with 4 grooves on E. and 2 grooves on W. faces; from which .

A cedar, 12 ins. diam., bears S.40°E., 125 lks. dist., marked T.11 S., R.15 E., S.4, B.T.

A pinon pine, 7 ins. diam., bears S.45°W., 98 lks. dist., marked T.11 S., R.15 E., S.5, B.T.

Land, mountainous.

Soil, sandy and gravelly; 3rd rate.

Timber, cedar and pinon pine.

- Undergrowth, sage brush.

A very little grass . . .

Subdivision of T.11 S., R.15 E. -Continued.

Chains Mountainous or heavily timbered land, 80.36 chs.

September 13, 1902.

September 14, 1902; At 7 h 30 m a.m., l.m.t., I set off $39^{\circ}49'N.$, on the lat. arc; $3^{\circ}40'N.$, on the decl. arc; and determine a true meridian, with the solar at the cor. of secs. 5, 6, 31, and 32, on S. bdy. of Tp., heretofore described.

Thence I run

$N.0^{\circ}03'W.$, bet. secs. 31 and 32.

Over level canon bottom; through dense greasewood.

- .75 Leave greasewood and enter cultivated land, bears E. and W.
- 2.25 Leave cultivated land and enter dense greasewood, bears E. and W.
- 3.75 Nine Mile Creek, 12 lks. wide, 3 ins. deep, course E.
- 6.50 Price-Fort Du Chesne telephone line, bears $N.80^{\circ}E.$ and $S.80^{\circ}W.$
- 7.25 Price-Vernal road, bears $N.80^{\circ}E.$ and $S.80^{\circ}W.$
- 8.00 Foot of perpendicular ledge, 50 ft. high, bears $N.80^{\circ}E.$ and $S.80^{\circ}W.$
- Leave canon bottom and begin abrupt ascent over a series of ledges.
- 15.00 Top of ridge, 500 ft. above canon, bears $N.10^{\circ}E.$ and $S.10^{\circ}W.$
- Descend.
- 20.00 Bottom of hollow, 100 ft. below ridge, course $S.20^{\circ}W.$ Ascend through scattering timber.
- 40.00 Set a sandstone, $16 \times 7 \times 4$ ins., 12 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Subdivision of T.11 S., R.15 E. -Continued.

Chains

- 45.00 Top of ridge, 300 ft. above hollow, bears N.W. and S.E.
Descend
- 80.00 Set a limestone, 36x12x6 ins., 27 ins. in the ground, for
cor. of secs. 29, 30, 31, and 32, marked with 1 notch on S.
and 5 notches on E. edges; from which
A cedar, 8 ins. diam., bears S. 69° W., 100 lks.
Dist., marked T.11 S., R.15 E., S.31, B.T.
No other trees within limits; raise a mound of stone,
2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
Land, mountainous and level canon bottom.
Soil, sandy loam and rocky; 2nd and 4th rate.
Timber, cedar and pinon pine.
Undergrowth, greasewood.
Good grass for grazing.
Mountainous land, or land covered with dense under-
growth, 78.50 chs.

East, on a random line bet. secs. 29 and 32.

- 40.00 Set temp. & sec. cor.
- 79.92 Intersect N. and S. line, 5 lks. S. of the cor. of secs.
28, 29, 32, and 33.
Thence I run
S. 89° 55' W., on a true line bet. secs. 29 and 32.
Over mountainous land; through scattering timber and
scattering undergrowth.
Ascend abruptly over ledges.
- 20.00 Top of ridge, 600 ft. above sec. cor., bears N.W. and
S.E.
Descend
- 30.25 Bottom of hollow, 200 ft. below ridge, course S.E.
Ascend
- 39.96 Set a sandstone, 24x10x4 ins., 18 ins. in the ground, for

Subdivision of T.11 S., R.15 E.-Continued.

- Chains $\frac{1}{4}$ sec.cor., marked $\frac{1}{4}$ on N.face; from which
- A pinon pine, 10 ins.diam., bears N.5°W., 8
lks.dist., marked $\frac{1}{4}$ S.29, B.T.
- A pinon pine, 9 ins.diam., bears S.5°W., 125
lks.dist., marked $\frac{1}{4}$ S.32, B.T.
- 42.25 Top of divide ridge between Gate Canon and Pete's
Canon, 400 ft.above hollow, bears N.25°W. and S.25°E.
Descend abruptly over ledges.
- 79.00 Bottom of Pete's Canon, 800 ft.below ridge, course
S.55°E.
Ascend .
- 79.92 The cor.of secs.29,30,31, and 32.
Land, mountainous.
Soil, sandy and rocky; 3rd and 4th rate.
Timber, cedar and pinon pine.
Undergrowth, sage brush.
Good grass for grazing.
Mountainous land, 79.92 chs.
-
- West, on a random line bet.secs.30 and 31.
- 40.00 Set temp. $\frac{1}{4}$ sec.cor.
- 77.98 Intersect W.bdy.of Tp., at the cor.of secs.25,30,31,
and ~~36~~, heretofore described.
Thence I run
- East, on a true line bet.secs.30 and 31.
Over mountainous land; through dense undergrowth and
scattering timber.
Descend^{4"}.
- 3.50 Bottom of hollow, 75 ft.below sec.cor., course S.
Ascend .
- 9.00 Top of ridge, 150 ft.above hollow, bears N. and S.
Descend .
- 20.00 Bottom of hollow, 150 ft.below ridge, course S.W.

Subdivision of T.11 S., R.15 E. -Continued.

Chains Ascend .

34.50 Top of ridge, 500 ft. above hollow, bears N. 20° E. and S. 20° W.

Descend .

37.98 Set a sandstone, 22x10x4 ins., 16 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

This cor. is 20 ft. below top of ridge.

55.00 Bottom of hollow, 400 ft. below ridge, course S. 20° E.

Ascend .

62.00 Top of ridge, 300 ft. above hollow, bears N. 20° W. and S. 20° E.

Descend abruptly.

77.98 The cor. of secs. 29, 30, 31, and 32.

Land, mountainous.

Soil, sandy and rocky; 3rd and 4th rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush and rabbit brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth, 77.98 chs.

September 14, 1902: At this cor. I set off 3° 34' N., on the decl. arc; and at 0 h 2 m p.m., l.m.t., observe the sun on the meridian, the resulting lat. is 39° 50' N.

N. 0° 03' W., bet. secs. 29 and 30.

Over mountainous land; through scattering timber and dense undergrowth.

Descend .

1.00 Bottom of Pete's Canon, course S. E .

Ascend abruptly over ledges.

40.00 Set a sandstone, 20x8x5 ins., 15 ins. in the ground, for

Subdivision of T.11 S., R.15 E. -Continued.

Chains

$\frac{1}{4}$ sec.cor., marked $\frac{1}{4}$ on W.face; from which

A pinon pine, 5 ins.diam., bears E., 150 lks.
lks.dist., marked $\frac{1}{4}$ S.29, B.T.

A pinon pine, 6 ins.diam., bears N.85°W., 25
lks.dist., marked $\frac{1}{4}$ S.30, B.T.

44.50 Top of ridge, 700 ft.above canon, bears E.and W.

Descend abruptly over ledges.

80.00 Set a limestone, 18x7x6 ins., 12 ins.in the ground, for
cor.of secs.19, 20, 29, and 30, marked with 2 notches on
S.and 5 notches on E.edges; from which

A pinon pine, 8 ins.diam., bears N.45°E., 115
lks.dist., marked T.11 S., R.15 E., S.20, B.T.

A pinon pine, 6 ins.diam., bears S.30°E., 70
lks.dist., marked T.11 S., R.15 E., S.29, B.T.

A pinon pine, 8 ins.diam., bears S.40°W., 85
lks.dist., marked T.11 S., R.15 E., S.30, B.T.

A pinon pine, 14 ins.diam., bears N.15°W., 105
lks.dist., marked T.11 S., R.15 E., S.19, B.T.

Land, mountainous.

Soil, sandy and rocky; 3rd and 4th rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous land, or land covered with dense under-
growth, 80.00 chs.

N.89°58'E., on a random line bet.secs.20 and 29.

40.00 Set temp. $\frac{1}{4}$ sec.cor.

79.96 Intersect N.and S.line, 10 lks.N.of the cor.of secs.
20, 21, 28, and 29.

Thence I run

N.89°58'W., on a true line bet.secs.20 and 29.

Subdivision of T.11 S., R.15 E. -Continued.

- Chains Over mountainous land; through heavy timber.
Ascend .
- 1.00 Top of ridge, 10 ft. above sec. cor., bears N. and S.
Descend gently.
- 6.25 Begin abrupt descent over ledges, bears N. and S.
- 14.00 Bottom of Gate Canon, 500 ft. below ridge, course
S. 20° E.
Ascend . Leave ledges.
- 15.75 Price-Vernal road, bears N. 20° W. and S. 20° E.
- 16.50 Price-Fort Du Chesne telephone line, bears N. 20° W.
and S. 20° E.
- 39.50 Top of ascent, 600 ft. above canon, bears N. and S.
Thence over level mesa.
- 39.98 Set a sandstone, 18x8x4 ins., 12 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from which
A cedar, 6 ins. diam., bears N. 55° E., 43 lks.
dist., marked $\frac{1}{4}$ S. 20, B. T.
A pinon pine, 10 ins. diam., bears S. 50° W., 46
lks. dist., marked $\frac{1}{4}$ S. 29, B. T.
- 59.00 Leave mesa, bears N. and S.
Descend .
- 79.96 The cor. of secs. 19, 20, 29, and 30.
Land, mountainous and level mesa.
Soil, sandy loam and rocky; 2nd and 4th rate.
Timber, cedar and pinon pine.
Good grass for grazing.
Mountainous or heavily timbered land, 79.96 chs.
-
- West, on a random line bet. secs. 19 and 30.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 78.30 Intersect W. bdy. of Tp., 14 lks. S. of the cor. of secs.
19, 24, 25, and 30.
Thence I run

Subdivision of T.11 S., R.15 E.-Continued.

Chains S.89°54'E., on a true line bet. secs. 19 and 30.
 Over mountainous land; through dense undergrowth.
 Descend .

15.00 Bottom of hollow, 100 ft. below sec. cor., course S.60°
 E.
 Ascend .

30.00 Top of ridge, 100 ft. above hollow, bears N.30°W. and
 S.30°E.
 Descend through scattering timber.

38.30 Set a sandstone, 24x12x4 ins., 18 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from which
 A pinon pine, 5 ins. diam., bears N.54°E., 150
 lks. dist., marked $\frac{1}{4}$ S.19, B.T.
 A pinon pine, 5 ins. diam., bears S.83°W., 135
 lks. dist., marked $\frac{1}{4}$ S.30, B.T.

55.00 Begin more abrupt descent into Pete's Canon, bears
 N. and S.

74.00 Bottom of Pete's Canon, 600 ft. below ridge, course
 S.10°W.
 Ascend through heavy timber.

78.30 The cor. of secs. 19, 20, 29, and 30.
 Land, mountainous.
 Soil, sandy loam and gravelly; 2nd and 3rd rate.
 Timber, cedar and pinon pine,
 Undergrowth, sage brush.
 Good grass for grazing.
 Mountainous or heavily timbered land, or land covered
 with dense undergrowth, 78.30 chs.

September 14, 1902.

September 15, 1902. At 7 h 30 m a., m.l.m.t., I set
 off 39°50'N., on the lat. arc; 3°16'N., on the decl. arc;
 and determine a true meridian, with the solar, at the

Subdivision of T.11 S., R.15 E. -Continued.

Chains cor. of secs. 19, 20, 29, and 30.

Thence I run

N.0°03'W., bet. secs. 19 and 20.

Over mountainous land; through scatterint Timber and scattering undergrowth.

Descend .

2.50 Bottom of hollow, 100 ft. below sec. cor., course W.

Ascend .

37.00 Top of ridge, 600 ft. above hollow, bears N.E. and S.W.

Descend gradually.

40.00 Set a quartzite stone, 20x13x4 ins., 15 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which

A pinon pine, 6 ins. diam., bears S.55°E., 57 lks. dist., marked $\frac{1}{2}$ S.20, B.T.

A cedar, 12 ins. diam., bears S.35°W., 26 lks. dist., marked $\frac{1}{2}$ S.19, B.T.

65.00 Bottom of hollow, 100 ft. below ridge, course W.

Ascend gradually.

75.00 Enter heavy timber, bears E. and W.

80.00 Set a quartzite stone, 24x6x5 ins., 18 ins. in the ground, for cor. of secs. 17, 18, 19, and 20, marked with 3 notches on S. and 5 notches on E. edges; from which

A pinon pine, 6 ins. diam., bears N.76°E., 26 lks. dist., marked T.11 S., R.15 E., S.17, B.T.

A pinon pine, 14 ins. diam., bears S.76°E., 70 lks. dist., marked T.11 S., R.15 E., S.20, B.T.

A pinon pine, 8 ins. diam., bears S.68°W., 63 lks. dist., marked T.11 S., R.15 E., S.19, B.T.

A pinon pine, 16 ins. diam., bears N.64°W., 14 lks. dist., marked T.11 S., R.15 E., S.18, B.T.

Land, mountainous.

Soil, sandy loam and gravelly; 2nd and 3rd rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

A very little grass.

Subdivision of T.11 S., R.15 E.-Continued.

- Chains Mountainous or heavily timbered land, 80.00 chs.
-
- S. 89° 58' E., on a random line bet. secs. 17 and 20.
- 40.00 Set temp. $\frac{1}{2}$ sec. cor.
- 79.88 Intersect N. and S. line, 2 lks. N. of the cor. of secs. 16, 17, 20, and 21.
- Thence I run
N. 89° 57' W., on a true line bet. secs. 17 and 20.
Over mountainous land; through dense undergrowth.
descend .
- 1.00 Bottom of hollow, 10 ft. below sec. cor., course S. 10° W.
Ascend .
- 7.80 Top of ridge, 60 ft. above hollow, bears N. and S.
Descend .
- 21.25 Price-Mort Du Chesne telephone line, bears N. and S.
- 22.00 Bottom of Gate Canon, 100 ft. below ridge, course S.
Ascend .
- 22.60 Price - Vernal road, bears N. and S.
- 34.75 Top of ridge, 200 ft. above canon, bears N. and S.
Descend .
- 39.94 Set a sandstone, 24x8x5 ins., 18 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
- 47.00 Bottom of canon, 200 ft. below ridge, course S.
Enter scattering timber, bears N. and S.
Ascend .
- 77.50 Top of divide ridge between Pete's and Gate Canons, 300 ft. above hollow, bears N. and S. 20° E.
Descend through heavy timber.
- 79.88 The cor. of secs. 17, 18, 19, and 20.

Subdivision of T.11 S., R.15 E. -Continued.

- Chains Land, mountainous.
 Soil, sandy loam and gravelly; 2nd and 3rd rate.
 Timber, cedar and pinon pine.
 Undergrowth, sage brush.
 A very little grass.
 Mountainous or heavily timbered land, or land covered
 with dense undergrowth, 79.88 chs.
-
- N. 89° 54' W., on a random line bet. secs. 18 and
 19.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 78.61 Intersect W. bdy. of Tp., 5 lks. N. of the cor. of secs.
 13, 18, 19, and 24, heretofore described.
 Thence I run
 S. 89° 56' E., on a true line bet. secs. 18 and
 19.
 Over rolling mesa; through dense undergrowth.
- 25.00 Enter scattering timber, bears N. and S.
- 33.00 Leave mesa, bears N. and S.
 Descend .
- 38.61 Set a limestone, 22x8x6 ins., 13 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of
 stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impractic-
 able.
- 42.50 Bottom of hollow, 300 ft. below mesa, course S.
 This is Pete's Canon. Ascend .
- 46.00 Top of ridge, 250 ft. above hollow, bears N. and S.
 Descend .
- 51.75 Bottom of hollow, 250 ft. below ridge, course S.
 Ascend .
- 60.00 Top of ridge, 300 ft. above hollow, bears N. and S.
 Descend .
- 67.00 Bottom of hollow, 50 ft. below ridge, course S.

Subdivision of T.11 S., R.15 E.-Continued.

Chains Ascend .

77.50 Enter heavy timber, bears N. and S.

78.61 The cor. of secs. 17, 18, 19, and 20.

Land, mountainous and rolling mesa.

Soil, sandy loam and gravelly ; 2nd and 3rd rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush and shadscales.

A very little grass .

Mountainous or heavily timbered land, or land covered with dense undergrowth, 78.61 chs.

September 15, 1902; At this cor. I set off $3^{\circ}11'N.$, on the decl. arc; and at 0 h 3 m p.m., l.m.t., observe the sun on the meridian, the resulting lat. is $39^{\circ}51'N.$

N. $0^{\circ}03'W.$, bet. secs. 17 and 18.

Over mountainous land; through heavy timber.

ascend along west slope of ridge.

35.00 Top of ridge, 200 ft. above sec. cor., bears N. $20^{\circ}W.$ and S. $20^{\circ}E.$

Thence along east side of ridge gently descending.

40.00 Set a sandstone, 28x12x4 ins., 21 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from whichA cedar, 8 ins. diam., bears N. $49^{\circ}E.$, 52 lks.dist., marked $\frac{1}{2}$ S. 17, B.T.A cedar, 8 ins. diam., bears N. $80^{\circ}W.$, 60 lks.dist., marked $\frac{1}{2}$ S. 18, B.T.49.50 Bottom of hollow, 150 ft. below ridge, course S. $65^{\circ}E.$

Ascend .

52.25 Top of ridge, 150 ft. above hollow, bears N. $65^{\circ}W.$ and S. $65^{\circ}E.$

Descend .

58.50 Bottom of hollow, 125 ft. below ridge, course E.

Subdivision of T.11 S., R.15 E. -Continued.

Chains Ascend .

69.25 Top of ridge, 200 ft. above hollow,, bears N.W. and S.E.
Descend .

76.50 Bottom of hollow, 100 ft. below ridge, course S.E.
Ascend .

80.00 Set a quartzite stone, 18x12x6 ins., 12 ins. in the
ground, for cor. of secs. 7, 8, 17, and 18, marked with
4 notches on S. and 5 notches on E. edges; from which
A pinon pine, 14 ins. diam., bears N. 43° E., 21
lks. dist., marked T.11 S., R.15 E., S. 8, B.T.
A pinon pine, 12 ins. diam., bears S. 67° E., 53
lks. dist., marked T.11 S., R.15 E., S. 17, B.T.
A pinon pine, 6 ins. diam., bears S. 44° W. 14
lks. dist., marked T.11 S., R.15 E., S. 18, B.T.
A pinon pine, 14 ins. diam., bears N. 55° W., 116
lks. dist., marked T.11 S., R.15 E., S. 7, B.T.

Land, mountainous.
Soil, sandy loam and gravelly; 2nd and 3rd rate.
Timber, cedar and pinon pine.
A very little grass.
Mountainous or heavily timbered land, 80.00 chs.

S. 89° 57' E., on a random line bet. secs. 8 and 17.

40.00 Set temp. & sec. cor.

79.98 Intersect N. and S. line, at the cor. of secs. 8, 9, 16,
and 17.
Thence I run
N. 89° 57' W., on a true line bet. secs. 8 and 17.
Over mountainous land; through scattering timber and
scattering undergrowth.
Descend along top of ridge.

4.10 Price-Port Du Chesne telephone line, bears N. and S.

5.25 Price-Vernal road, bears N. and S.

Subdivision of T.11 S., R.15 E. -Continued.

Chains

- 8.15 Bottom of Gate Canon, 50 ft. below sec. cor., course South.
Ascend .
- 9.90 Enter heavy timber, bears N. and S.
- 32.00 Top of ridge, 300 ft. above canon, bears N. and S.
Descend through scattering timber.
- 39.99 Set a limestone, 20x12x4 ins., 15 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; from which
A pinon pine, 12 ins. diam., bears S. 30° E., 80 lks. dist., marked $\frac{1}{2}$ S. 17, B. T.
No other trees within limits; raise a mound of stone 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable.
- 48.50 Bottom of hollow, 250 ft. below ridge, course S.
Ascend .
- 65.00 Top of ridge, 200 ft. above hollow, bears N. 80° W. and S. 60° E.
Descend .
- 79.98 The cor. of secs. 7, 8, 17, and 18.
Land, mountainous.
Soil, sandy loam and gravelly; 2nd and 3rd rate.
Timber, cedar and pinon pine.
Undergrowth, sage brush.
A very little grasss.
Mountainous or heavily timbered land, 79.98 chs.
-
- N. 89° 50' W. , on a random line bet. secs. 7 and 18.
- 40.00 Set temp. $\frac{1}{2}$ sec. cor.
- 78.30 Intersect W. bdy. of Tp., 10 lks. N. of the cor. of secs. 7, 12, 13, and 18., heretofore described.
Thence I run
East, on a true line, bet. secs. 7 and 18.

Subdivision of T.11 S., R.15 E.-Continued.

- Chains Over mountainous land; through heavy timber.
- Ascend .
- 5.00 Top of ridge, 50 ft. above sec. cor., bears N.E. and S.W.
- Descend .
- 11.50 Bottom of hollow, 200 ft. below ridge, course S.10°E.
- Ascend .
- 16.50 Top of ridge, 150 ft. above hollow, bears N.10°E. and
S.10°W.
- Descend .
- 25.75 Bottom of hollow, 100 ft. below ridge, course S.W.
- Ascend .
- 38.30 Set a quartzite stone, 20x10x5 ins., 15 ins. in the
ground, for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; from which
A pinon pine, 8 ins. diam., bears N.25°E., 35
lks. dist., marked $\frac{1}{2}$ S.7, B.T.
A pinon pine, 14 ins. diam., bears S.25°W., 30
lks. dist., marked $\frac{1}{2}$ S.18, B.T.
- 45.00 Top of ridge, 150 ft. above hollow, bears N.E. and S.W.
- Descend .
- 60.00 Bottom of hollow, 150 ft. below ridge, course S.20°E.
- Ascend .
- 71.00 Top of ridge, 200 ft. above hollow, bears N.20°W. and
S.20°E.
- Descend .
- 76.00 Bottom of hollow, 200 ft. below ridge, course S.E.
- Ascend .
- 78.30 The cor. of secs. 7, 8, 17, and 18.
Land, mountainous.
Soil, sandy loam and gravelly; 2nd and 3rd rate.
Timber, cedar and pinon pine.
Good grass for grazing.
Mountainous or heavily timbered land, 78.30 chs.

September 15, 1902.

Subdivision of T.11 S., R.15 E. -Continued.

Chains

September 13, 1902. At 7 h 30 m a.m., l.m.t., I set off
 39° 58' N., on the lat. arc; 2° 54' N., on the decl. arc; and
 determine a true meridian, with the solar, at the cor.
 of secs. 7, 8, 17, and 18.

Thence I run

N. 0° 03' W., bet. secs. 7 and 8.

Over mountainous land; through scattering timber.

Ascend .

3.00 Top of ridge, 20 ft. above sec. cor., bears E. and W.

Descend .

25.00 Bottom of hollow, 150 ft. below ridge, course S. E.

Ascend abruptly over ledges and shale rock.

34.00 Top of steep ascent, bears E. and W.

Leave ledges and shale rock and ascend more gently.

40.00 Set a sandstone, 24x12x4 ins., 18 ins. in the ground,
 for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which

A pinon pine, 6 ins. diam., bears S. 62° E., 64
 lks. dist., marked $\frac{1}{2}$ S. 8, B. T.

A pinon pine, 6 ins. diam., bears S. 36° W., 46
 lks. dist., marked $\frac{1}{2}$ S. 7, B. T.

40.50 Top of ridge, 800 ft. above hollow, bears N. 30° E. and S.
 30° W.

Descend .

60.00 Bottom of hollow, 200 ft. below ridge, course S. W.

Ascend .

80.00 Set a sandstone, 24x14x4 ins., 18 ins. in the ground,
 for cor. of secs. 5, 6, 7, and 8, marked with 5 notches
 on S. and 5 notches on E. edges; from which

A pinon pine, 14 ins. diam., bears N. 60° E., 110
 lks. dist., marked T. 11 S., R. 15 E., S. 5, B. T.

A pinon pine, 14 ins. diam., bears S. 45° E., 120
 lks. dist., marked T. 11 S., R. 15 E., S. 8, B. T.

A pinon pine, 14 ins. diam., bears S. 42° W., 122
 lks. dist., marked T. 11 S., R. 15 E., S. 7, B. T.

Subdivision of T.11 S., R.15 E. -Continued.

Chains A pinon pine, 24 ins. diam., bears N. 40° W., 120
 lks. dist., marked T.11 S., R.15 E., S. 6, B.T.

Land, mountainous.

Soil, sandy and white clay; 3rd rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

A very little grass.

Mountainous land, 80.00 chs .

S. 89° 57' E., on a random line bet. secs. 5 and 8.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.10 Intersect N. and S. line, 5 lks. N. of the cor. of secs.
4, 5, 8, and 9.

Thence I run

 N. 89° 55' W., on a true line bet. secs. 5 and 8.

 Over mountainous land; through heavy timber.

Descend .

.50 Bottom of hollow, course S.E.

 Ascend .

4.00 Top of ridge, 100 ft. above hollow, bears N. and S.

 Descend .

13.00 Bottom of hollow, 200 ft. below ridge, course S.

 Ascend .

30.00 Top of ridge, 175 ft. above hollow, bears N. and S.

 Descend .

35.00 Bottom of hollow, 100 ft. below ridge, course S.

 Ascend .

40.05 Set a sandstone, 18x12x6 ins., 12 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from which

 A pinon pine, 8 ins. diam., bears N. 5° E., 6
 lks. dist., marked $\frac{1}{4}$ S. 5, B.T.

 A pinon pine, 5 ins. diam., bears S. 70° E., 21
 lks. dist., marked $\frac{1}{4}$ S. 8, B.T.

Subdivision of T.11 S., R.15 E.-Continued.

Chains

- 53.00 Old road on top of divide ridge between Nine Mile Canon and the Du Chesne Valley, 200 ft. above hollow, bears N. 70° E. and S. 70° W.
Descend .
- 70.00 Bottom of hollow, 100 ft. below ridge, course N. E.
Ascend .
- 77.00 Old road on top of divide ridge between Nine Mile Canon and the Du Chesne Valley, 100 ft. above hollow, bears N. 30° W. and S. 30° E..
Descend .
- 80.10 The cor. of secs. 5, 6, 7, and 8.
Land, mountainous.
Soil, sandy and white clay; 3rd rate.
Timber, cedar and pinon pine.
Undergrowth, sage brush.
A very little grass.
Mountainous or heavily timbered land, 80.10 chs.
-
- West, on a random line bet. secs. 6 and 7.
- 40.00 Set temp. & sec. cor.,
- 78.00 Intersect W. bdy. of Tp., 11 lks. S. of the cor. of secs. 1, 6, 7, and 12, heretofore described.
Thence I run
S. 89° 55' E., on a true line bet. secs. 6 and 7.
Over mountainous land; through heavy timber:
- 2.00 Top of ridge, 30 ft. above sec. cor., bears N. 10° E. and S. 10° W.
Descend .
- 6.80 Bottom of hollow, 50 ft. below ridge, course S. W.
Ascend .
- 14.00 Top of ridge, 150 ft. above hollow, bears N. and S.
Descend .

Subdivision of T.11 S., T.15 E.-Continued.

Chains

- 27.40 Bottom of hollow, 150 ft. below ridge, course S.E.
Ascend .
- 31.00 Top of ridge, 100 ft. above hollow, bears N. and S.
Descend .
- 35.75 Bottom of hollow, 60 ft. below ridge, course S.20°W.
Ascend .
- 38.00 Set a sandstone, 18x10x4 ins., 12 ins. in the ground,
for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; from which
A cedar, 6 ins. diam., bears S.40°W., 110 lks.
dist., marked $\frac{1}{2}$ S.7, B.T.
A pinon pine, 7 ins. diam., bears N.13°W.,
60 lks. dist., marked $\frac{1}{2}$ S.6, B.T.
- 49.00 Top of ridge, 100 ft. above hollow, bears N. and S.
Descend .
- 61.00 Bottom of hollow, 125 ft. below ridge, course S.
Ascend .
- 78.00 The cor. of secs. 5, 6, 7, and 8.
Land, mountainous.
Soil, sandy and white clay; 3rd rate.
Timber, cedar and pinon pine.
A very little grass.
Mountainous or heavily timbered land, 78.00 chs.
September 16, 1902: At the noon hour the sky is
overcast and solar observations are impossible.
-
- N.0°03'W., on a true line bet. secs. 5 and 6.
Over mountainous land; through heavy timber;
Ascend .
- 1.20 Old road, bears E. and W.
- 2.50 Top of divide ridge between Nine Mile Canon and
the Du chesne Valley, 100 ft. above sec. cor., bears
N.W. and S.E.

Subdivision of T.11 S., R.15 E. -Continued.

Chains Descend .

36.00 Bottom of hollow, 200 ft. below ridge, course N.E.
Ascend .

40.00 Set a sandstone, 20x12x4 ins., 15 ins. in the ground,
for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on W. face; from which

A pinon pine, 10 ins. diam., bears S. 5° E., 20
lks. dist., marked $\frac{1}{2}$ S. 5, B.T.

A pinon pine, 24 ins. diam., bears S. 50° W., 46
lks. dist., marked $\frac{1}{2}$ S. 6, B.T.

42.50 Top of ridge, 100 ft. above hollow, bears E. and W.
Descend .

77.00 Bottom of hollow, 150 ft. below ridge, course N. 80° E
Ascend .

80.42 Intersect the Second Standard Parallel South, 11.04
chs. West of the re-established standard cor. of secs,
31 and 32, heretofore described.

Set a sandstone, 16x14x6 ins., 11 ins. in the ground,
for closing cor. of secs. 5 and 6, marked C.C. on S.,
with 5 grooves on E. and 1 groove on W. faces; from
which

A cedar, 10 ins. diam., bears S. 24° E., 100 lks.
dist., marked T.11 S., R.15 E., S. 5, B.T.

A pinon pine, 5 ins. diam., bears S. 60° W., 49
lks. dist., marked T.11 S., R.15 E., S. 6, B.T.

Land, mountainous .

Soil, sandy and white clay ; 3rd rate.

Timber, cedar and pinon pine, ;

A very little grass.

Mountainous or heavily timbered land, 80.42 chs.

September 18, 1902.

Note: There being no public or other officer, authorized
to administer oaths, within reasonable distance at
the beginning and ending of this survey; in order to
save time and expense I administer the preliminary

Subdivision of T.11 S., R.15 E.-Continued.

Chains and final oaths myself.

GENERAL DESCRIPTION.

This township is very rough in the southern part; a table land cut up by box canons in the central part; and low rolling mountains in the northern part. And the soil ranges from sandy loam to rocky land.

The soil of the bottom of Nine Mile Canon is sandy loam; 2nd rate; the remainder of the land is mostly sandy and white clay; 3rd rate.

The southwestern part of the township is well watered by Nine Mile Creek, which is about 12 lks. wide, and 3 ins. deep (average); the only other water in the township is a small spring in sec. 22, in Water Canon; ^{the water from} this spring is alkaline and fit only for stock to drink.

Scattering cedar and pinon pine timber is found in the southern and central parts of the township and in the northern part there is a heavy growth of the same kind of timber.

There is no mineral in the township.

Pete — Francis has a house in sec. 32 and cultivated land along the bottom of Nine Mile Canon, in secs. 31, 32, and 33; the improvements are worth about \$2000.00 (two thousand dollars).

Preston Nutter has a house and cultivated land in sec. 33, worth about (\$500.00) five hundred dollars.

John Stewart.
U.S. Deputy Surveyor.

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Handwritten notes in the right margin, including the word "Description" and other illegible text.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by John R. Stewart, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of fractional subdivision T.12 S., R.12 E.; Sub. T.13 S., R.12 E.; Sub. T.14 S., R.15 E.; Sub. T.13 S., R.14 E.; Fractional Sub. T.12 S., R.14 E.; and Sub. T.11 S., R.15 E. of the Salt Lake Base & Meridian, Utah showing the respective capacities in which they acted:

- Hyrum G. Smith, Chairman.
John G. Smith, Chairman.
Jacob A. Acord, Moundman.
Edwin A. Peary, Moundman.
Joseph A. Passey, Arman.
Andy J. Stewart, Arman.
Otto R. Stewart, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted John R. Stewart, United States Deputy Surveyor, in surveying all those parts or portions of the Fractional subdivision T.12 S., R.12 E.; Subdivision T.13 S., R.12 E.; Subdivision T.14 S., R.15 E.; Subdivision T.13 S., R.14 E.; Fractional Subdivision T.12 S., R.14 E.; and Subdivision T.11 S., R.15 E. of the Salt Lake Base and meridian, State of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor

- General for Utah
Hyrum G. Smith, Chairman.
John G. Smith, Chairman.
Jacob A. Acord, Moundman.
Edwin A. Peary, Moundman.
Joseph A. Passey, Arman.
Andy J. Stewart, Arman.
Otto R. Stewart, Flagman.

Subscribed and sworn to before me this 16th day of September 1902



John R. Stewart, U.S. Deputy Surveyor

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, John Stewart United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Edward H. Anderson United States Surveyor General for The State of Utah, bearing date of the 2 day of January, 1902, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for The State of Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of The fractional subdivisions of T125R12E, The subdivisions of T135R12E, T145R15E, T135R14E, T125R14E (fractional) and T115R15E.

of the Salk Lake Base and meridian, in the State of Utah, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for The State of Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

John Stewart
United States Deputy Surveyor.

Subscribed by said John Stewart, and sworn to before me }
this 2 day of January, 1902

Edward H. Anderson
U.S. Surveyor General for
Utah



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salk Lake, Utah, January 16, 1902 189

The foregoing field notes of the survey of The subdivisional lines of Township 11 North Range 15 East of the Salk Lake Base & Meridian, Utah

executed by John Stewart under his contract No. 250, dated January 2, 1902, 189, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Edward H. Anderson
United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General.